

=> d his

(FILE 'HOME' ENTERED AT 14:22:39 ON 11 JAN 2007)

FILE 'REGISTRY' ENTERED AT 14:22:48 ON 11 JAN 2007

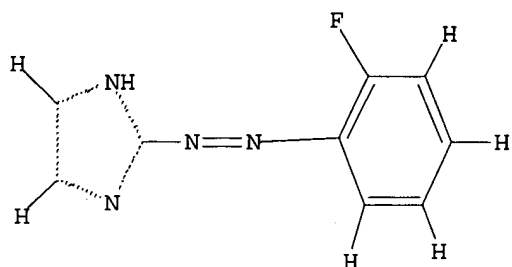
L1 STRUCTURE UPLOADED
L2 STRUCTURE UPLOADED
L3 STRUCTURE UPLOADED
L4 8 S L1 OR L2 OR L3
L5 200 S L4 FULL

FILE 'CAPLUS' ENTERED AT 14:25:08 ON 11 JAN 2007

L6 46 S L5

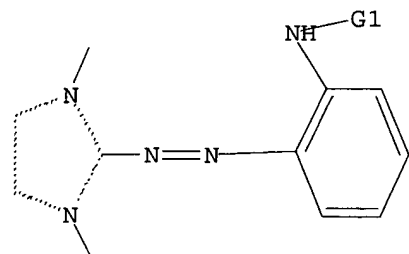
=> d que l6 stat

L1 STR



Structure attributes must be viewed using STN Express query preparation.

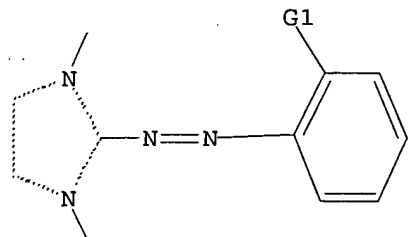
L2 STR



G1 H, Ak

Structure attributes must be viewed using STN Express query preparation.

L3 STR



O¹-Ak

G1 X, [01]

Structure attributes must be viewed using STN Express query preparation.

L5 200 SEA FILE=REGISTRY SSS FUL L1 OR L2 OR L3

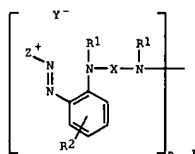
L6 46 SEA FILE=CAPLUS ABB=ON PLU=ON L5

=> d 1-46 bib abs hitstr

L6 ANSWER 1 OF 46 CAPLUS COPYRIGHT 2007 ACS ON STN
 AN 2006:1338094 CAPLUS
 TI Preparation of cationic oligomeric azo dyes
 IN Eliu, Victor Paul; Froehling, Beate; Kauffmann, Dominique
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 63pp.
 CODEN: PIXXD2

DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006:134051	A1	20061221	WO 2006-EP62976	20060607
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRAI EP 2005-105233	A	20050615		
GI				



AB Disclosed are oligomeric cationic azo dyes of formula I, wherein their salts, isomers, hydrates and other solvates, wherein R1 is hydrogen; C1-C12 alkyl, which may be substituted by one or more C1-C5 alkyl; C1-C5-alkoxy, hydroxy or -(CO)-H; -(CO)-C1-C5 alkyl; Ph or phenyl-C1-C4 alkyl, wherein the Ph moiety may be substituted by one or more C1-C5 alkyl, C1-C5 alkoxy, halogen, -NH2, mono-C1-C5 alkylamino, di-C1-C5 alkylamino, -NO2, carboxy or hydroxy; R2 is hydrogen; or C1-C5 alkyl; X is C1-C10 alkylene, which may be substituted by one or more C1-C5 alkyl, hydroxy, C1-C5 alkoxy, amino, mono-C1-C5 alkylamino, di-C1-C5 alkylamino, -SH, and/or interrupted by one or more -O- or -S-S-; C5-C10 cycloalkylene; C5-C12 arylene; C5-C12 arylene-(C1-C10 alkylene); biphenylene, which may be substituted by one or more C1-C5 alkyl, hydroxy, C1-C5 alkoxy, amino,

L6 ANSWER 1 OF 46 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)
 CRN 21228-90-0
 CHF C H3 O4 S

Me-O-SO3-

RN 916988-20-0 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

CH 1

CRN 110-70-3
 CHF C4 H12 N2

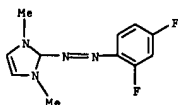
MeNH-CH2-CH2-NHMe

CH 2

CRN 916988-18-6
 CHF C11 H11 F2 N4 . C H3 O4 S

CH 3

CRN 916988-17-5
 CHF C11 H11 F2 N4



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CH 4

CRN 21228-90-0
 CHF C H3 O4 S

Me-O-SO3-

RN 916988-21-1 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

CH 1

CRN 109-76-2
 CHF C3 H10 N2

L6 ANSWER 1 OF 46 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)
 mono-C1-C5 alkylamino, di-C1-C5 alkylamino, -SH, and/or interrupted by one or more -O-, C1-C4 alkylene, -NR3-, -S- or -S-S-, R3 is hydrogen; C1-C12 alkyl; C2-C14 alkenyl; C6-C12 aryl; C6-C12 aryl-C1-C12 alkyl; or C1-C12 alkyl-C6-C12 aryl; Y is an anion; Z is 1,3-thiazolyl; 1,2-thiazolyl; 1,3-benzothiazolyl; 2,3-benzothiazolyl; imidazolyl; 1,3,4-thiadiazolyl; 1,3,5-thiadiazolyl; 1,3,4-triazolyl; pyrazolyl; benzimidazolyl; benzopyrazolyl; pyridinyl; quinolinyl; pyrimidinyl; or isoxazolyl; and n is a no. from 2-100. Furthermore, the present invention relates to novel cationic oligomeric azo dyes, compns. thereof, esp. comprising other dyes, and to application for hair dyeing. Thus, 2,4-difluoroaniline was reacted with imidazole to obtain an azo dye which was reacted with dimethylsulfate to obtain a quaternized salt. A dye emulsion contg. 1% of the above dye was used to dye hair to a red-brown color.

IT 916988-19-7P 916988-20-OP 916988-21-1P
 916988-22-2P 916988-23-3P 916988-24-4P
 916988-25-5P
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of cationic oligomeric azo dyes)

RN 916988-19-7 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

CH 1

CRN 107-15-3
 CHF C2 H8 N2

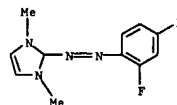
H2N-CH2-CH2-NH2

CH 2

CRN 916988-18-6
 CHF C11 H11 F2 N4 . C H3 O4 S

CH 3

CRN 916988-17-5
 CHF C11 H11 F2 N4



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CH 4

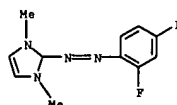
L6 ANSWER 1 OF 46 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)
 H2N-CH2-CH2-CH2-NH2

CH 2

CRN 916988-18-6
 CHF C11 H11 F2 N4 . C H3 O4 S

CH 3

CRN 916988-17-5
 CHF C11 H11 F2 N4



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CH 4

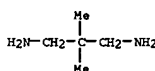
CRN 21228-90-0
 CHF C H3 O4 S

Me-O-SO3-

RN 916988-22-2 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

CH 1

CRN 7328-91-8
 CHF C5 H14 N2



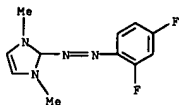
CH 2

CRN 916988-18-6
 CHF C11 H11 F2 N4 . C H3 O4 S

CH 3

CRN 916988-17-5

L6 ANSWER 1 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CMF C11 H11 F2 N4



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 4

CRN 21228-90-0
CMF C H3 O4 S

Me-O-SO₃⁻

RN 916988-23-3 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 124-09-4
CMF C6 H16 N2

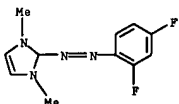
H₂N-(CH₂)₆-NH₂

CM 2

CRN 916988-18-6
CMF C11 H11 F2 N4 . C H3 O4 S

CM 3

CRN 916988-17-5
CMF C11 H11 F2 N4



L6 ANSWER 1 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
Me-O-SO₃⁻

RN 916988-25-5 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 110-60-1
CMF C4 H12 N2

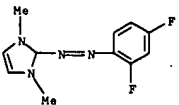
H₂N-(CH₂)₄-NH₂

CM 2

CRN 916988-18-6
CMF C11 H11 F2 N4 . C H3 O4 S

CM 3

CRN 916988-17-5
CMF C11 H11 F2 N4



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 4

CRN 21228-90-0
CMF C H3 O4 S

Me-O-SO₃⁻

L6 ANSWER 1 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 4

CRN 21228-90-0
CMF C H3 O4 S

Me-O-SO₃⁻

RN 916988-24-4 CAPLUS
CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 56-17-7
CMF C4 H12 N2 S2 . 2 C1 H

H₂N-CH₂-CH₂-S-S-CH₂-CH₂-NH₂

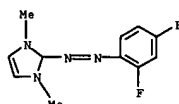
● 2 HCl

CM 2

CRN 916988-18-6
CMF C11 H11 F2 N4 . C H3 O4 S

CM 3

CRN 916988-17-5
CMF C11 H11 F2 N4



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

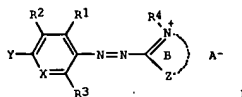
CM 4

CRN 21228-90-0
CMF C H3 O4 S

L6 ANSWER 2 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:1279446 CAPLUS
DN 146:46605
TI Radiation-curable ink-jet ink compositions with good curability and light resistance
IN Yamada, Satoru; Kawakami, Hiroshi
PA Fuji Photo Film Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 61pp.
CODEN: JXXXXF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2006328257	A	20061207	JP 2005-155217	20050527
PRAI	JP 2005-155217		20050527		
GI					



AB The compns. contain cationic azo compound represented by formula I, polymerizable compds., and photoinitiators, wherein R1, R2, and R3 = H or substitute; R4 = H, alkyl, or aryl; X = CR5 or N; Y = NR6R7, SR8, or OR9; Z = O, S, or NR10; R5 = H or substitute; R6-R10 = H, alkyl, or aryl; B = N, C, and Z-containing 5-membered heterocycle; A- = counter anion. A typical

composition comprised 1,6-hexanediol diacrylate 3, dipentaerythritol hexaacrylate 7, Irgacure 1870 (photoinitiator) 0.3, and a cationic azo compound 0.1 g.

IT 894778-33-7 916444-84-3 916444-98-9
RL: TEM (Technical or engineered material use); USES (Uses)
(radiation-curable ink-jet ink compns. with good curability and light resistance)

RN 894778-33-7 CAPLUS

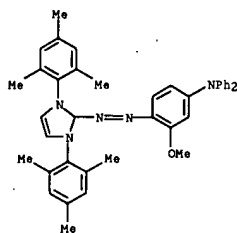
CN 1H-imidazolium, 2-[[4-(diphenylamino)-2-methoxyphenyl]azo]-1,3-bis(2,4,6-trimethylphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 894778-32-6
CMF C40 H40 N5 O

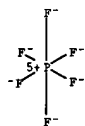
L6 ANSWER 2 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

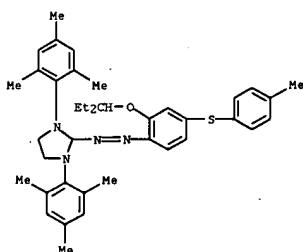
 CRN 16919-18-9
 CMF F6 P
 CCI CCS

 RN 916444-84-3 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

CM 1

 CRN 916444-83-2
 CMF C46 H66 N5 O5

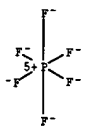
L6 ANSWER 2 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)



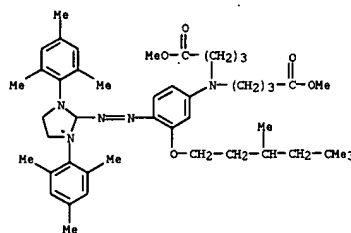
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

 CRN 16919-18-9
 CMF F6 P
 CCI CCS


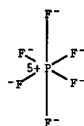
L6 ANSWER 2 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

 CRN 16919-18-9
 CMF F6 P
 CCI CCS

 RN 916444-98-9 CAPLUS
 CN INDEX NAME NOT YET ASSIGNED

CM 1

 CRN 916444-97-8
 CMF C39 H47 N4 O 5

L6 ANSWER 2 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

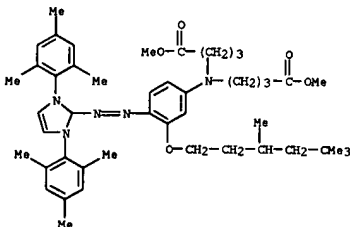
(Continued)

L6 ANSWER 3 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

 AN 2006:1061404 CAPLUS
 DN 145:420955
 TI Photocurable dye-based ink-jet ink compositions and image recording method
 IN Kawakami, Hiroshi; Shimohara, Norihide
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 47pp.
 CODEN: JKOXAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FI JP 2006274054	A	20061012	JP 2005-95416	20050329
PRAI JP 2005-95416		20050329		
AB	The ink compns. contain dyes (e.g., an oil-soluble magenta dye), photocationic polymerization initiators, oxirane compds., and optionally oxetane compds. The inks exhibit good UV curing efficiency and give images with good light resistance.			
IT 894778-14-4	RL: TM (Technical or engineered material use); USES (Uses) (magenta dye) UV-curable dye-based ink-jet inks with good curability and light resistance)			
RN 894778-14-4	CAPLUS			
CN	1H-imidazolium, 2-[[4-[[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1,3-bis(2,4,6-trimethylphenyl)-, hexafluorophosphate(1-)] (9CI) [CA INDEX NAME]			

CM 1

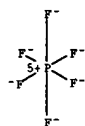
 CRN 894778-13-3
 CMF C46 H64 N5 O5


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

 CRN 16919-18-9
 CMF F6 P
 CCI CCS

L6 ANSWER 3 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L6 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:653111 CAPLUS

DN 145:126000

TI Azo compounds with clear color and good light resistance, their tautomers, and their dye mixtures

IN Yamada, Satoru

PA Fuji Photo Film Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 33 pp.

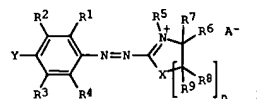
CODEN: JKXGAF

DT Patent

LA Japanese

FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2006176745	A	20060706	JP 2005-70033	20050311
PRAI JP 2004-342606	A	20041126		
GI				



AB The invention relates to azo compds. I, useful for inks, [R1-9 = H, alkyl, aryl, alkoxy, aryloxy, alkylsulfonyl, arylsulfonyl, alkylthio, arylthio, NH2, alkoxycarbonyl, aryloxy, carbonyl, acyl, acylamino, sulfonylamino, carbamoyl, carbamoylamino, alkoxycarbonylamino, halo, cyano group, NO2, R5 = C2-3 alkyl when Y = N(R12)R13, X = S, and R5 = alkyl; n ≥ 1; X = NR10, O, S; R10 = alkyl, aryl; Y = OR11, SR11, N(R12)R13; R11 = H, alkyl, aryl; R12-13 = H, alkyl, aryl, alkoxy, aryloxy, alkylsulfonyl, arylsulfonyl, alkylthio, arylthio, NH2, alkoxycarbonyl, aryloxy, carbonyl, acyl, acylamino, sulfonylamino, carbamoyl, carbamoylamino, alkoxycarbonylamino; A- = counter anions; R1R2, R2R12, R12R13, R13R3, and R3R4 may form ring; R6R7, R7R8, and R8R9 may form ring other than benzene ring] or their tautomers. Thus, I [R1 = O(CH2)2CHMeCH2Bu-tert, R2-4, R6-9 = H, R5 = aryl, n = 1, X = NC6H5, Y = N[(CH2)3CO2Me]2, A- = PF6-] showed half band width 91.0 nm and molar absorption coefficient 4.09 × 10⁴ obtained in a UV-VIS absorption spectrum.

IT 894778-14-4P 894778-17-7P 894778-20-2P
894778-22-4P 894778-33-7P 894778-59-7P
894778-61-1P 897038-13-0P 897038-16-3P
897038-20-9P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(azo dyes with clear color and good light resistance)

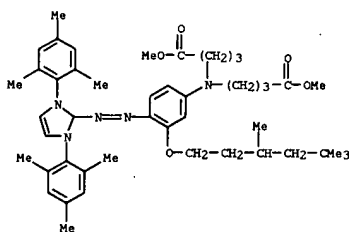
RN 894778-14-4 CAPLUS

CN 1H-Imidazolium, 2-[[4-[[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1,3-bis(2,4,6-trimethylphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

L6 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

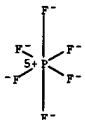
CRN 894778-13-3
CMF C46 H54 N5 O5



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 16919-18-9
CMF F6 P
CCI CCS



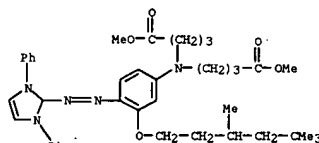
RN 894778-17-7 CAPLUS

CN 1H-Imidazolium, 2-[[4-[[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1,3-diphenyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 894778-16-6
CMF C40 H52 N5 O5

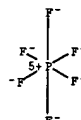
L6 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 16919-18-9
CMF F6 P
CCI CCS



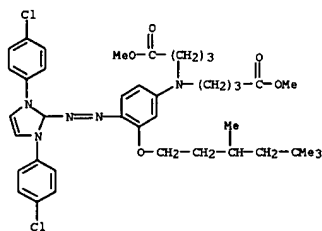
RN 894778-20-2 CAPLUS

CN 1H-Imidazolium, 2-[[4-[[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1,3-bis(4-chlorophenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

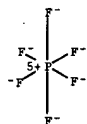
CRN 894778-19-9
CMF C40 H50 Cl2 N5 O5

L6 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

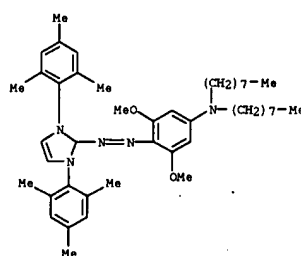
CM 2

CRN 16919-18-9
CMF F6 P
CCI CCSRN 894778-22-4 CAPLUS
CN 1H-imidazolium, 2-[[4-(diethylamino)-2,6-dimethoxyphenyl]azo]-1,3-bis(2,4,6-trimethylphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

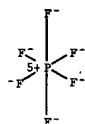
CRN 894778-21-3
CMF C45 H66 N5 O2

L6 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



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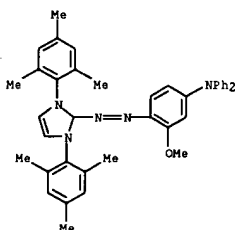
CM 2

CRN 16919-18-9
CMF F6 P
CCI CCSRN 894778-33-7 CAPLUS
CN 1H-imidazolium, 2-[[4-(diphenylamino)-2-methoxyphenyl]azo]-1,3-bis(2,4,6-trimethylphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

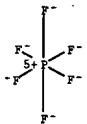
CRN 894778-32-6
CMF C40 H40 N5 O

L6 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

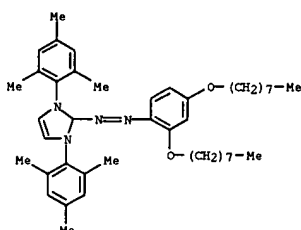
CM 2

CRN 16919-18-9
CMF F6 P
CCI CCSRN 894778-59-7 CAPLUS
CN 1H-imidazolium, 2-[[2,4-bis(octyloxy)phenyl]azo]-1,3-bis(2,4,6-trimethylphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

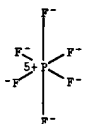
CRN 894778-58-6
CMF C43 H61 N4 O2

L6 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

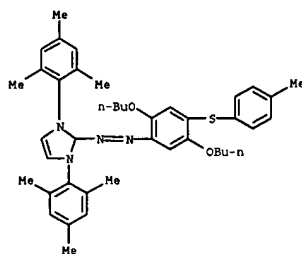
CM 2

CRN 16919-18-9
CMF F6 P
CCI CCSRN 894778-61-1 CAPLUS
CN 1H-imidazolium, 2-[[2,5-dibutoxy-4-((4-methylphenyl)thio)phenyl]azo]-1,3-bis(2,4,6-trimethylphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 894778-60-0
CMF C42 H51 N4 O2 S

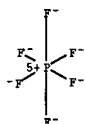
L6 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 16919-18-9
 CMF F6 P
 CCI CCS

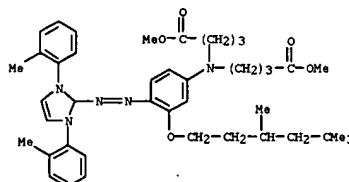


RN 897038-13-0 CAPLUS
 CN 1H-imidazolium, 2-[[4-[[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1,3-bis(2-methylphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 897038-12-9
 CMF C42 H56 N5 O5

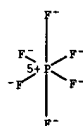
L6 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 16919-18-9
 CMF F6 P
 CCI CCS



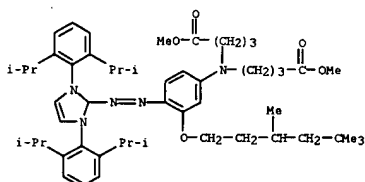
RN 897038-16-3 CAPLUS

CN 1H-imidazolium, 2-[[4-[[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1,3-bis(2,6-bis(1-methylethyl)phenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 897038-15-2
 CMF C52 H76 N5 O5

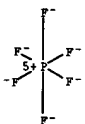
L6 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 16919-18-9
 CMF F6 P
 CCI CCS

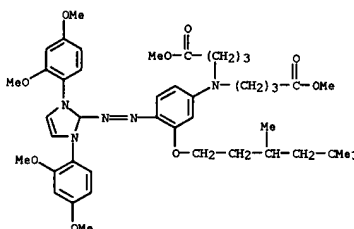


RN 897038-20-9 CAPLUS
 CN 1H-imidazolium, 2-[[4-[[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1,3-bis(3,5-dimethoxyphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 897038-19-6
 CMF C44 H60 N5 O9

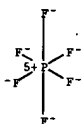
L6 ANSWER 4 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

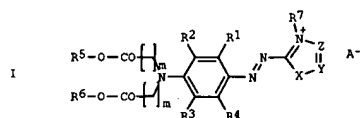
CRN 16919-18-9
 CMF F6 P
 CCI CCS



L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2006:629688 CAPLUS
 DN 145:105204
 TI Azo compounds, their tautomers, and dye compositions with clear color and good light resistance
 IN Yamada, Satoru
 PA Fuji Photo Film Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 53 pp.
 CODEN: JKOXAF
 DT Patent
 LA Japanese
 FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006169493	A	20060629	JP 2005-70029	20050311
JP 2004-333304	A	20041117		

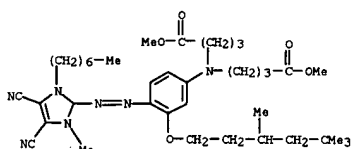
GI



AB The invention relates to azo compds., I and their tautomers (R1-4 = H, alkyl, aryl, alkoxy, aryloxy, alkylsulfonyl, arylsulfonyl, alkylthio, arylthio; R5-6 = H, alkyl; R7 = alkyl, aryl; m ≥ 1; X, Y, Z = C, N, O, S, X-, Y-, and Z-containing 5-membered ring may be condensed; A- = counter anion). Thus, I [R1 = O(CH2)2CHMeCH2Bu-tert, R2-4 = H, R5-7 = Me, m = 3, X = C10H21-substituted N, Y, Z = C, A- = PF6] showed absorption maximum wavelength (λmax) 540.8 nm and molar absorption constant (ε) 55.50 × 104.

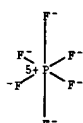
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 894778-24-6P 894778-28-0P 894778-33-7P
 894778-37-1P 894778-41-7P 894778-59-7P
 894778-61-1P
 RL: IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (azo dyes with clear color and good light resistance)
 RN 894778-00-8 CAPLUS
 CN 1H-Imidazolium, 2-[[4-[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1-decyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)
 CM 1
 CRN 894777-99-2
 CHF C39 H66 N5 O5

L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



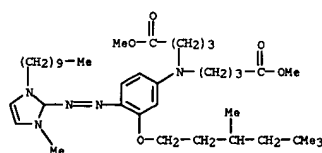
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CM 2
 CRN 16919-18-9
 CHF F6 P
 CCI CCS



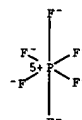
RN 894778-14-4 CAPLUS
 CN 1H-Imidazolium, 2-[[4-[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1,3-bis(2,4,6-trimethylphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)
 CM 1
 CRN 894778-13-3
 CHF C46 H64 N5 O5

L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



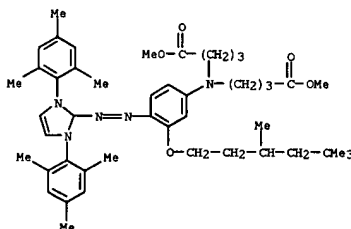
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2
 CRN 16919-18-9
 CHF F6 P
 CCI CCS



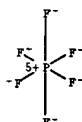
RN 894778-02-0 CAPLUS
 CN 1H-Imidazolium, 2-[[4-[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-4,5-dicyano-1-heptyl-3-methyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)
 CM 1
 CRN 894778-01-9
 CHF C38 H58 N7 O5

L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



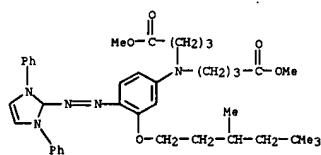
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2
 CRN 16919-18-9
 CHF F6 P
 CCI CCS



RN 894778-17-7 CAPLUS
 CN 1H-Imidazolium, 2-[[4-[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1,3-diphenyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)
 CM 1
 CRN 894778-16-6
 CHF C40 H52 N5 O5

L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



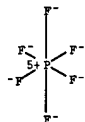
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



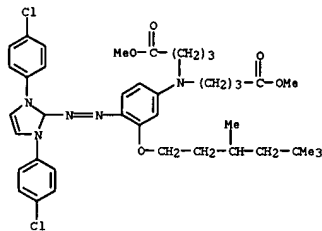
RN 894778-20-2 CAPLUS
CN 1H-imidazolium, 2-[[4-[[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1,3-bis(4-chlorophenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 894778-19-9

CMF C40 H50 C12 N5 O5

L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



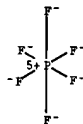
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



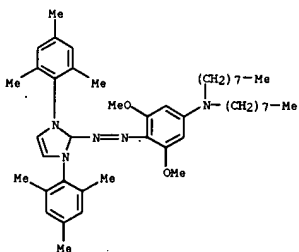
RN 894778-22-4 CAPLUS
CN 1H-imidazolium, 2-[[4-[[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1,3-bis(4-chlorophenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 894778-21-3

CMF C45 H66 N5 O2

L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



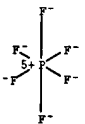
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



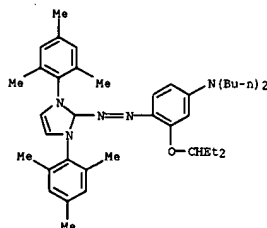
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CN 1H-imidazolium, 2-[[4-[[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1,3-bis(4-chlorophenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 894778-23-5

CMF C40 H56 N5 O

L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



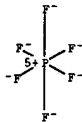
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



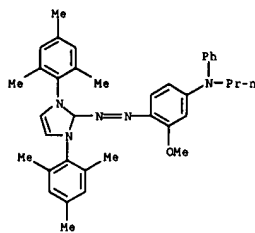
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CN 1H-imidazolium, 2-[[4-[[bis(4-methoxy-4-oxobutyl)amino]-2-[(3,5,5-trimethylhexyl)oxy]phenyl]azo]-1,3-bis(4-chlorophenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 894778-27-9

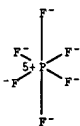
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L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

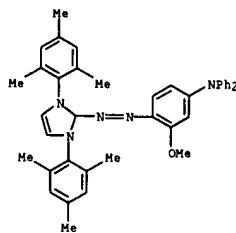
CH 2
 CRN 16919-18-9
 CMF F6 P
 CCI CCS



RN 894778-33-7 CAPLUS
 CN 1H-imidazolium, 2-[[4-(diphenylamino)-2-methoxyphenyl]azo]-1,3-bis(2,4,6-trimethylphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

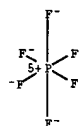
CH 1
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 CMF C40 H40 N5 O

L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

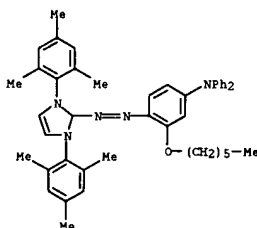
CH 2
 CRN 16919-18-9
 CMF F6 P
 CCI CCS



RN 894778-37-1 CAPLUS
 CN 1H-imidazolium, 2-[[4-(diphenylamino)-2-(hexyloxy)phenyl]azo]-1,3-bis(2,4,6-trimethylphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

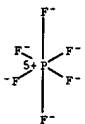
CH 1
 CRN 894778-36-0
 CMF C45 H50 N5 O

L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

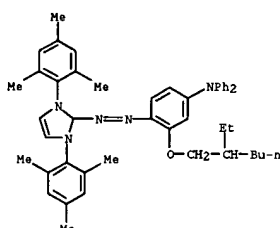
CH 2
 CRN 16919-18-9
 CMF F6 P
 CCI CCS



RN 894778-41-7 CAPLUS
 CN 1H-imidazolium, 2-[[4-(diphenylamino)-2-[(2-ethylhexyl)oxy]phenyl]azo]-1,3-bis(2,4,6-trimethylphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

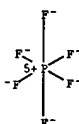
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 CMF C47 H54 N5 O

L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

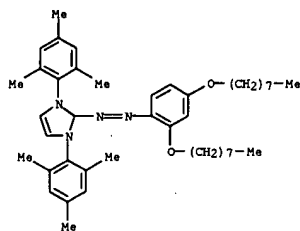
CH 2
 CRN 16919-18-9
 CMF F6 P
 CCI CCS



RN 894778-59-7 CAPLUS
 CN 1H-imidazolium, 2-[[4-(diphenylamino)-2-[[2,4-bis(octyloxy)phenyl]azo]-1,3-bis(2,4,6-trimethylphenyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

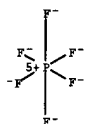
CH 1
 CRN 894778-58-6
 CMF C43 H61 N4 O2

L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 16919-18-9
CMF F6 P
CCI CCSRN 894778-61-1 CAPLUS
CN 1H-imidazolium, 2-[[[2,5-dibutoxy-4-[(4-methylphenyl)thio]phenyl]azo]-1,3-bis(2,4,6-trimethylphenyl)-, hexafluorophosphate(1-)] (9CI) (CA INDEX NAME)

CM 1

CRN 894778-60-0
CMF C42 H51 N4 O2 S

L6 ANSWER 6 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2006:166129 CAPLUS
DN 144:263646
TI High-capacity optical storage media
IN Bacher, Jean-Pierre; Baudin, Gisèle; Wendeborn, Frederique; Adam, Jean-Marie; Lehmann, Urs; Birbaum, Jean-Luc
PA Ciba Specialty Chemicals Holding Inc., Switz.
SO PCT Int. Appl., 120 pp.
CODEN: PIXXDZ
DT Patent
LA English
FAN.CNT 1

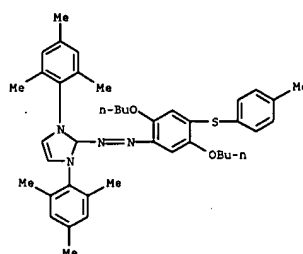
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
WO 2006082152	A1	20060810	WO 2006-EP50427	20060125
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
FRAI EP 2004-103931	A	20040816		
EP 2004-105558	A	20041105		
EP 2005-100720	A	20050202		
GI				

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention accordingly relates to an optical recording medium comprises a substrate, a reflecting layer and a recording layer, wherein the recording layer comprises a compound of formula I or a mesomeric or tautomeric form thereof (M1 is a metal cation in the oxidation state +3, a hydroxy or halogeno metal group wherein the metal is in the oxidation state +4, or an oxo metal group wherein the metal is in the oxidation state +5;

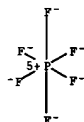
III and IV are each independently of the other V, VI or VII; VIII is IX, X, XI, XII, XIII or XIV; XV is XVI or C2-8 heteroaryl unsubstituted or mono- or poly-substituted by R10-13; Q1 = N or CR18; Q2 = N or CR19; Q3, Q5 and Q7 are each independently of the other CR20R21, O, S or NR22; Q4 = CR16 or

L6 ANSWER 5 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

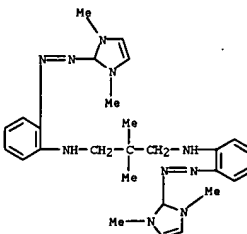
CRN 16919-18-9
CMF F6 P
CCI CCS

L6 ANSWER 6 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

N and Q6 is CR17 or N; and R2 and/or R6 = O, S or NR33; R1,3-5,7-13,15-19 = H, halogen OR23, SR23, NR22R24, etc.; R14 = C1-12 alkyl, C3-12 cycloalkyl, etc.; R20,21 = C1-12 alkyl, C2-12 alkenyl, etc.; R22 = H, C1-4 alkyl, C2-4 alkenyl, etc.; R24,26,27 = H, C1-6 alkyl, C2-6 alkenyl, etc.; R33 = COR24, COR26R27, CN, etc.). Please see the disclosure for the other substituents which are less relevant. The compds. of formula I are novel and also claimed, as well as the compd. of formula II, or a meso-mer or tautomer thereof (R38 = halogen, CF3, NO2, CN, COR22, COOR23, SO3R23, NCO or SCN; G1, G2, M1, R1, R2, R4, R5, R6, R8, R22 and R23 are as defined in formula I; M2m+ = cation with a pos. charges; and m = integer 1, 2 or 3). The optical recording media are remarkably suitable for DVD-R (658 nm), esp. at high recording speeds.

IT 877312-76-0
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(high-capacity optical storage media containing)RN 877312-76-0 CAPLUS
CN 1H-imidazolium, 2,2'-[[[2,2-dimethyl-1,3-propanediyl]bis(imino-2,1-phenyleneazo)]bis[1,3-dimethyl-, bis[bis[4-[(5-nitro-2-thiazolyl)-m3]azo-mN1]-1,3-benzenediolato(2-)-m3]cobaltate(1-)] (9CI) (CA INDEX NAME)

CM 1

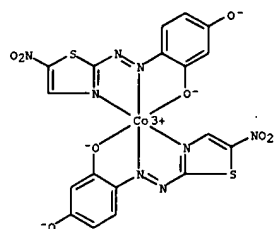
CRN 838086-26-3
CMF C27 H36 N10

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

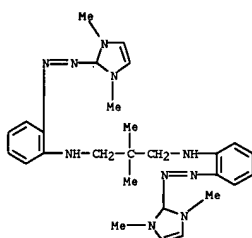
CM 2

CRN 776325-16-7
CMF C18 H8 Co N8 O8 S2
CCI CCS

L6 ANSWER 6 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



IT 877178-56-8P
 RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of high-capacity optical storage media)
 RN 877178-56-8 CAPLUS
 CN 1H-imidazolium, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(imino-2,1-phenyleneazo)]bis[1,3-dimethyl-, bis(methyl sulfate) (9CI) (CA INDEX NAME)
 CM 1
 CRN 838086-26-3
 CMF C27 H36 N10



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

L6 ANSWER 7 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

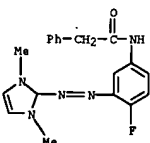
AN 2005:1223755 CAPLUS
 DN 145:14068
 TI Sulfide hair dyes
 AU Anon.
 CS USA
 SO IP.com Journal (2005), 5(10B), 24 (No. IPCOM000130141D), 13 Oct 2005
 CODEN: IJPOEX; ISSN: 1533-0001
 PB IP.com, Inc.
 DT Journal; Patent
 LA English

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI IP 130141D		20051013		
PRAI IP 2005-130141D		20051013		

AB Sulfide dyes and dyeing compns. are disclosed. The sulfide dyes are selected from anionic, cationic, neutral, amphoteric and zwitterionic dyes, and are preferably derived from compds. such as anthraquinones, acridines, azomethines, benzodifuranones, coumarins, diketopyrroles, diphenylmethanes, indigoids, naphthaquinones, merocyanines, oxazines, pyrenequinones, phthalocyanines, phenazines, and thioxanthenes. The dyes which can be used as single components or as mixts. of 2 or more components of the same or different dye classes are useful for the dyeing of organic materials, such as hair fibers, preferably human hair.

IT 866023-54-3P
 RL: COS (Cosmetic use); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); RACT (Reactant or reagent); USES (Uses)
 (preparation of disulfides for use in hair dyes)
 RN 866023-54-3 CAPLUS
 CN 1H-imidazolium, 2-[[[2-fluoro-5-[(phenylacetyl)amino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1
 CRN 866023-53-2
 CMF C19 H19 F N5 O



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0
 CMF C H3 O4 S

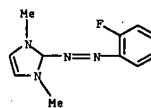
L6 ANSWER 6 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CRN 21228-90-0
 CMF C H3 O4 S

Me-O-SO3-

IT 836623-36-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of high-capacity optical storage media)
 RN 836623-36-0 CAPLUS
 CN 1H-imidazolium, 2-[(2-fluorophenyl)azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1
 CRN 836623-35-9
 CMF C11 H12 F N4



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2
 CRN 21228-90-0
 CMF C H3 O4 S

Me-O-SO3-

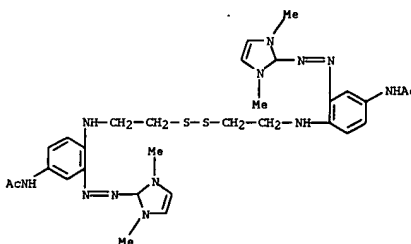
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Me-O-SO3-

IT 866487-93-6P
 RL: COS (Cosmetic use); PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 (preparation of disulfides for use in hair dyes)
 RN 866487-93-6 CAPLUS
 CN 1H-imidazolium, 2,2'-[dithiobis[2,1-ethanediylimino[5-(acetylamino)-2,1-phenyleneazo]]bis[1,3-dimethyl-, bis(methyl sulfate) (9CI) (CA INDEX NAME)

CM 1
 CRN 866487-92-5
 CMF C30 H40 N12 O2 S2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2
 CRN 21228-90-0
 CMF C H3 O4 S

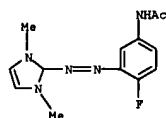
Me-O-SO3-

IT 866023-29-2P
 RL: COS (Cosmetic use); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (preparation of disulfides for use in hair dyes)
 RN 866023-29-2 CAPLUS
 CN 1H-imidazolium, 2-[[[5-(acetylamino)-2-fluorophenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

L6 ANSWER 7 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CRN 866023-28-1
 CNP C13 H15 F N5 O



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

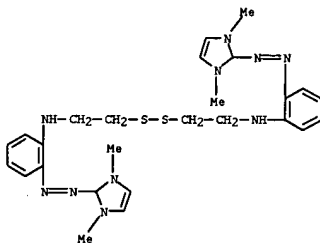
CH 2

CRN 21228-90-0
 CNP C H3 O4 S

Me-O-SO₃⁻

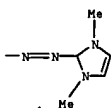
IT 866487-91-4P 866488-08-6P 866488-09-7P
 RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of disulfides for use in hair dyes)
 RN 866487-91-4 CAPLUS
 CN 1H-Imidazolium, 2,2'-[dithiobis(2,1-ethanediylimino)-2,1-phenyleneazo]]bis[1,3-dimethyl-, dichloride (9CI) (CA INDEX NAME)

PAGE 1-A



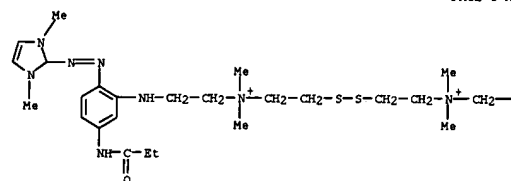
L6 ANSWER 7 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-B



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 866488-09-7 CAPLUS
 CN 1H-Imidazolium, 2,2'-[dithiobis(2,1-ethanediyl(dimethylimino))-2,1-ethanediylimino]-4-[(1-oxopropyl)amino]-2,1-phenyleneazo]]bis[1,3-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



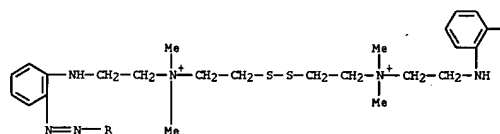
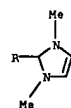
L6 ANSWER 7 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 2-A

● 2 Cl⁻

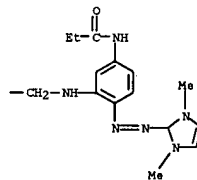
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 866488-08-6 CAPLUS
 CN 1H-Imidazolium, 2,2'-[dithiobis(2,1-ethanediyl(dimethylimino))-2,1-ethanediylimino]-2,1-phenyleneazo]]bis[1,3-dimethyl- (9CI) (CA INDEX NAME)

PAGE 1-A



L6 ANSWER 7 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

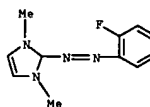
PAGE 1-B



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 IT 836623-36-0P 866023-57-6P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
 (preparation of disulfides for use in hair dyes)
 RN 836623-36-0 CAPLUS
 CN 1H-Imidazolium, 2-[(2-fluorophenyl)azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CH 1

CRN 836623-35-9
 CNP C11 H12 F N4



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CH 2

CRN 21228-90-0
 CNP C H3 O4 S

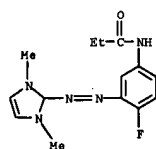
Me-O-SO₃⁻

RN 866023-57-6 CAPLUS
 CN 1H-Imidazolium, 2-[(2-fluoro-5-[(1-oxopropyl)amino]phenyl)azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CH 1

CRN 866023-56-5
 CNP C14 H17 F N5 O

L6 ANSWER 7 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CH 2

CRN 21228-90-0
CMF C H3 O4 SMe-O-SO₃⁻

L6 ANSWER 8 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:1090140 CAPLUS

DN 143:372829

TI Sulfide and disulfide dyes for use in dyeing keratin-containing fibers

IN Eliu, Victor Paul; Froehling, Beate; Kauffmann, Dominique

PA Ciba Specialty Chemicals Holding Inc., Switz.

SO Brit. UK Pat. Appl., 110 pp.

CODEN: BAXXDU

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2412916	A	20051012	GB 2005-6757	20050404
WO 2005097051	A2	20051020	WO 2005-EP51412	20050329
WO 2005097051	A3	20051215		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRAI EP 2004-101455 A 20040408

EP 2004-105995 A 20041123

OS HARFAT 143:372829

AB A method of dyeing keratin-containing fibers (such as wool and hair) comprises

treating the fiber with at least one sulfide or disulfide dye (Markush structures given). 2,2'-Dithiobis(2-ethylaminophenylazo)-1,3-dimethylimidazolium difluoride (I) dye was prepared by the reaction of 2-(p-fluorophenylazo)-1,3-dimethylimidazolium chloride derivative (preparation given) with cysteamine dihydrochloride. A solution of 0.1% I was applied on the hair for 20 min at room temperature, then rinsed and dried to obtain a red color.

IT 866487-91-4P 866487-93-6P 866487-95-8P

866487-97-0P 866488-08-6P 866488-09-7P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

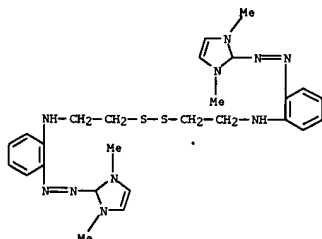
(sulfide and disulfide dyes for use in dyeing keratin-containing fibers)

RN 866487-91-4 CAPLUS

CN 1H-imidazolium, 2,2'-[dithiobis(2,1-ethanediylimino-2,1-phenyleneazo)]bis[1,3-dimethyl-, dichloride (9CI) (CA INDEX NAME)]

L6 ANSWER 8 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



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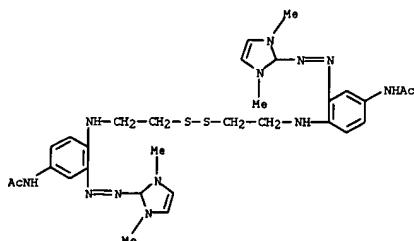
● 2 Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 866487-93-6 CAPLUS

CN 1H-imidazolium, 2,2'-[dithiobis(2,1-ethanediylimino[5-(acetylamino)-2,1-phenyleneazo]]bis[1,3-dimethyl-, bis(methyl sulfate) (9CI) (CA INDEX NAME)]

CH 1

CRN 866487-92-5
CMF C30 H40 N12 O2 S2

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 8 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

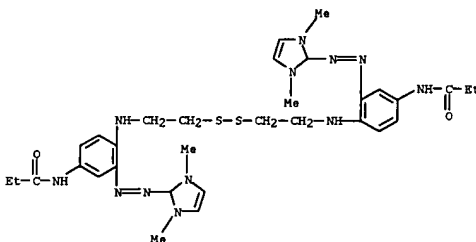
CH 2

CRN 21228-90-0
CMF C H3 O4 SMe-O-SO₃⁻

RN 866487-95-8 CAPLUS

CN 1H-imidazolium, 2,2'-[dithiobis(2,1-ethanediylimino[5-[(1-oxopropyl)amino]-2,1-phenyleneazo]]bis[1,3-dimethyl-, bis(methyl sulfate) (9CI) (CA INDEX NAME)]

CH 1

CRN 866487-94-7
CMF C32 H44 N12 O2 S2

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CH 2

CRN 21228-90-0
CMF C H3 O4 SMe-O-SO₃⁻

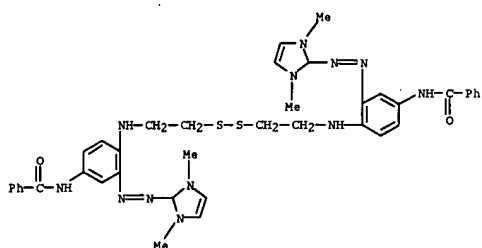
RN 866487-97-0 CAPLUS

CN 1H-imidazolium, 2,2'-[dithiobis(2,1-ethanediylimino[5-(benzoylamino)-2,1-phenyleneazo]]bis[1,3-dimethyl-, bis(methyl sulfate) (9CI) (CA INDEX NAME)]

CH 1

CRN 866487-96-9
CMF C40 H44 N12 O2 S2

L6 ANSWER 8 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

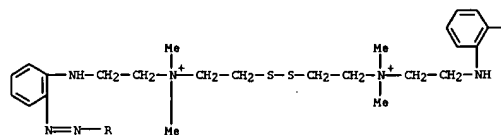
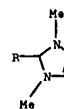
CRN 21228-90-0
CMF C H3 O4 S

Me-O-SO3-

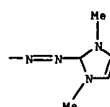
RN 866488-08-6 CAPLUS
CN 1H-imidazolium, 2,2'-[dithiobis[2,1-ethanediyl(dimethyliminio)-2,1-ethanediylimino-2,1-phenyleneazo]]bis[1,3-dimethyl- (9CI) (CA INDEX NAME)

L6 ANSWER 8 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

PAGE 1-A



PAGE 1-B



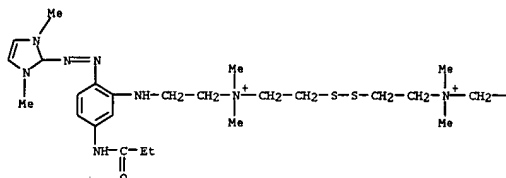
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 866488-09-7 CAPLUS

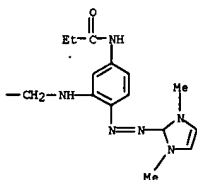
CN 1H-imidazolium, 2,2'-[dithiobis[2,1-ethanediyl(dimethyliminio)-2,1-ethanediylimino(4-[(1-oxopropyl)amino]-2,1-phenyleneazo))]bis[1,3-dimethyl- (9CI) (CA INDEX NAME)

L6 ANSWER 8 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

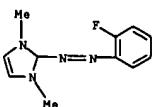
IT 836623-36-0P 866023-29-2P 866023-54-3P

866023-57-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(sulfide and disulfide dyes for use in dyeing keratin-containing fibers)

RN 836623-36-0 CAPLUS
CN 1H-imidazolium, 2-[(2-fluorophenyl)azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 836623-35-9
CMF C11 H12 F N4

L6 ANSWER 8 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

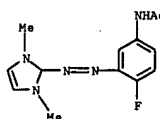
CRN 21228-90-0
CMF C H3 O4 S

Me-O-SO3-

RN 866023-29-2 CAPLUS

CN 1H-imidazolium, 2-[[5-(acetylamino)-2-fluorophenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 866023-28-1
CMF C13 H15 F N5 O

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0
CMF C H3 O4 S

Me-O-SO3-

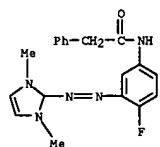
RN 866023-54-3 CAPLUS

CN 1H-imidazolium, 2-[[2-fluoro-5-[(phenylacetyl)amino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 866023-53-2
CMF C19 H19 F N5 O

L6 ANSWER 8 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO₃⁻

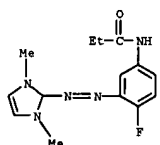
RN 866023-57-6 CAPLUS

CN 1H-imidazolium, 2-[[2-fluoro-5-[(1-oxopropyl)amino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 866023-56-5

CMF C14 H17 F N5 O



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO₃⁻

L6 ANSWER 9 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:1062680 CAPLUS

UN 143:352823

TI 1,3-disubstituted-2-[(2-amino-5-acylamino)phenyl]azo]imidazolium salts for hair dyes

IN Eliu, Victor Paul; Sauder, Thomas; Kauffmann, Dominique; Froehling, Beate

PA Ciba Specialty Chemicals Holding Inc, Switz.

SO Brit. UK Pat. Appl., 89 pp.

COUEN: BAKXDU

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2412661	A	20051005	GB 2005-5930	20050323
WO 2005095522	A2	20051013	WO 2005-EP51323	20050323
WO 2005095522	A3	20051110		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CM, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, HT, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1732990	A2	20061220	EP 2005-729785	20050323
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRAI EP 2004-101368	A	20040402		
WO 2005-EP51323	W	20050323		

OS MARPAT 143:352823

AB Azo dyes, e.g., 1,3-disubstituted-2-[(2-amino-5-acylamino)phenyl]azo]imidazolium salts, are useful for the dyeing of human hair. Thus, the above compds. are prepared and used at 0.5% in a hair dye formulation.

IT 866023-27-0F 866023-32-7F 866023-33-8F

866023-34-9F 866023-35-0F 866023-36-1F

866023-38-3F 866023-42-9F 866023-44-1F

866023-46-3F 866023-48-5F 866023-50-9F

866023-52-1F

RI: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(aminoacylamino)phenyl]azo]imidazolium salts for hair dyes)

RN 866023-27-0 CAPLUS

CN 1H-imidazolium, 2-[[5-(acetylamino)-2-(methylamino)phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

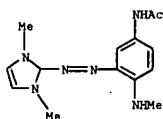
CRN 866023-26-9

CMF C14 H19 N6 O

L6 ANSWER 8 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

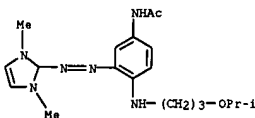
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO₃⁻

RN 866023-32-7 CAPLUS

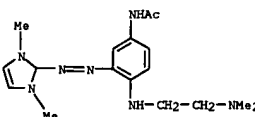
CN 1H-imidazolium, 2-[[5-(acetylamino)-2-[(1-methylethoxy)propyl]amino]phenyl]azo]-1,3-dimethyl-, fluoride (9CI) (CA INDEX NAME)

● F⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 866023-33-8 CAPLUS

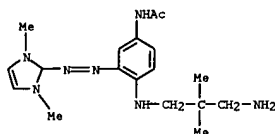
CN 1H-imidazolium, 2-[[5-(acetylamino)-2-[(1-methylethoxy)propyl]amino]phenyl]azo]-1,3-dimethyl-, fluoride (9CI) (CA INDEX NAME)

● F⁻

L6 ANSWER 9 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

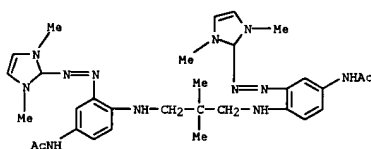
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 866023-34-9 CAPLUS
 CN 1H-imidazolium, 2-[[5-(acetylamino)-2-[(3-amino-2,2-dimethylpropyl)amino]phenyl]azo]-1,3-dimethyl-, fluoride (9CI) (CA INDEX NAME)

● F⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 866023-35-0 CAPLUS
 CN 1H-imidazolium, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(imino[5-(acetylamino)-2,1-phenylene]azo)]bis[1,3-dimethyl-, difluoride (9CI) (CA INDEX NAME)

● 2 F⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 866023-36-1 CAPLUS
 CN 1H-imidazolium, 2,2'-[1,6-hexanediylbis(imino[5-(acetylamino)-2,1-phenylene]azo)]bis[1,3-dimethyl-, difluoride (9CI) (CA INDEX NAME)

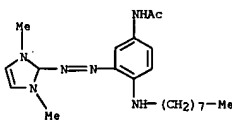
L6 ANSWER 9 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Me-O-SO₃⁻

RN 866023-42-9 CAPLUS
 CN 1H-imidazolium, 2-[[5-(acetylamino)-2-(octylamino)phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 866023-41-8
 CMF C21 H33 N6 O



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

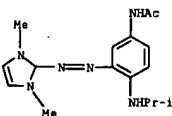
CRN 21228-90-0
 CMF C H3 O4 S

Me-O-SO₃⁻

RN 866023-44-1 CAPLUS
 CN 1H-imidazolium, 2-[[5-(acetylamino)-2-[(1-methylethyl)amino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 866023-43-0
 CMF C16 H23 N6 O

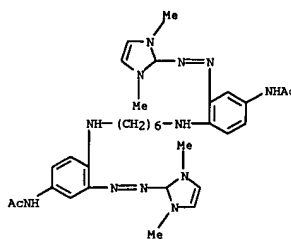


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0

L6 ANSWER 9 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

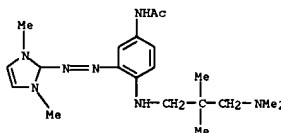
● 2 F⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 866023-38-3 CAPLUS
 CN 1H-imidazolium, 2-[[5-(acetylamino)-2-[(3-(dimethylamino)-2,2-dimethylpropyl]amino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 866023-37-2
 CMF C20 H32 N7 O



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0
 CMF C H3 O4 S

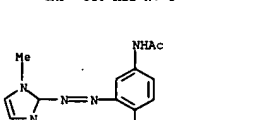
L6 ANSWER 9 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Me-O-SO₃⁻

RN 866023-46-3 CAPLUS
 CN 1H-imidazolium, 2-[[5-(acetylamino)-2-[(2-aminoethyl)amino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 866023-45-2
 CMF C15 H22 N7 O



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

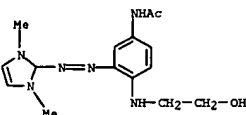
CRN 21228-90-0
 CMF C H3 O4 S

Me-O-SO₃⁻

RN 866023-48-5 CAPLUS
 CN 1H-imidazolium, 2-[[5-(acetylamino)-2-[(2-hydroxyethyl)amino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 866023-47-4
 CMF C15 H21 N6 O2



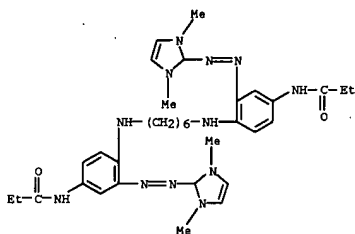
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

L6 ANSWER 9 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CRN 21228-90-0
CMF C H3 O4 SMe-O-SO₃⁻RN 866023-50-9 CAPLUS
CN 1H-Imidazolium, 2,2'-[1,6-hexanediylbis[imino[5-[(1-oxopropyl)amino]-2,1-phenylene]azo]]bis[1,3-dimethyl-, bis(methyl sulfate) (9CI) (CA INDEX NAME)

CM 1

CRN 866023-49-6
CMF C34 H48 N12 O2

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0
CMF C H3 O4 SMe-O-SO₃⁻RN 866023-52-1 CAPLUS
CN 1H-Imidazolium, 2,2'-[1,6-hexanediylbis[imino[5-(benzoylamino)-2,1-phenylene]azo]]bis[1,3-dimethyl-, bis(methyl sulfate) (9CI) (CA INDEX NAME)]

CM 1

CRN 866023-51-0

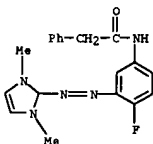
L6 ANSWER 9 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0
CMF C H3 O4 SMe-O-SO₃⁻RN 866023-54-3 CAPLUS
CN 1H-Imidazolium, 2-[[2-fluoro-5-[(phenylacetyl)amino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

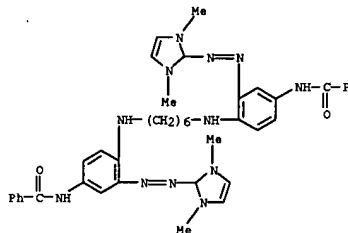
CRN 866023-53-2
CMF C19 H19 F N5 O

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0
CMF C H3 O4 SMe-O-SO₃⁻RN 866023-57-6 CAPLUS
CN 1H-Imidazolium, 2-[[2-fluoro-5-[(1-oxopropyl)amino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 866023-56-5
CMF C14 H17 F N5 OL6 ANSWER 9 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CMF C42 H48 N12 O2

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0
CMF C H3 O4 SMe-O-SO₃⁻

IT 866023-29-2P 866023-54-3P 866023-57-6P

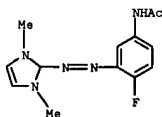
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

((aminoacylamino)phenyl)azoimidazolium salts for hair dyes)

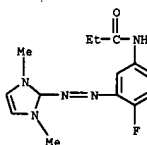
RN 866023-29-2 CAPLUS

CN 1H-Imidazolium, 2-[[5-(acetylamino)-2-fluorophenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 866023-28-1
CMF C13 H15 F N5 O

L6 ANSWER 9 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0
CMF C H3 O4 SMe-O-SO₃⁻RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:564646 CAPLUS

DN 143:83171

TI Hair dyeing with capped diazotized compounds and coupling components

IN Eliu, Victor Paul; Froehling, Beate; Kauffmann, Dominique

PA Ciba Specialty Chemicals Holding Inc., Switz.

SO PCT Int. Appl., 79 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005058840	A2	20050630	WO 2004-EP53335	20041208
WO 2005058840	A3	20050811		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
GB 2409862	A	20050713	GB 2004-27428	20041215
PRAI EP 2003-104814	A	20031219		

OS MARPAT 143:83171

AB The present invention relates to a method of coloring porous material, which comprises contacting the material being colored, with a capped diazonium compound containing a cationic radical of an organic compound, and a

radical of an unsubstituted or substituted, aliphatic or aromatic amine, and optionally a coupling component. Further, the present invention relates to novel compds. and compns. thereof. Thus, a dye emulsion contained 0.01, cetearyl alc. 3.5, Ceteareth-80 1.0, glyceryl mono/distearate 0.5, stearamide DEA 3.0, stearamphopropyl sulfonate 1.0, Polyquaternium-6 0.5, and water qs to 100%.

IT 836623-18-8

RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)

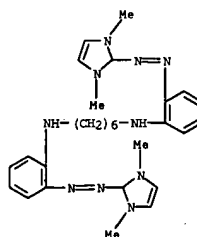
(hair dyeing with capped diazotized compds. and coupling components)

RN 836623-18-8 CAPLUS

CN 1H-imidazolium, 2,2'-[1,6-hexanediylbis(imino-2,1-phenyleneazo)]bis[1,3-dimethyl-, difluoride (9CI) (CA INDEX NAME)

L6 ANSWER 10 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)



● 2 F-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 11 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2005:116243 CAPLUS

DN 142:204147

TI 1,3-Disubstituted 2-(phenylazo)imidazolium cationic direct dyes and

2-(2-fluorophenylazo)imidazole for hair dyes

IN Eliu, Victor Paul; Froehling, Beate

PA Ciba Specialty Chemicals Holding Inc., Switz.

SO Brit. UK Pat. Appl., 126 pp.

CODEN: BAKXDU

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 2404661	A	20050209	GB 2004-16150	20040720
WO 2005012437	A1	20050210	WO 2004-EP51481	20040714
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1648967	A1	20060426	EP 2004-766211	20040714
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1826386	A	20060830	CN 2004-80021345	20040714
BR 2004012825	A	20060926	BR 2004-12825	20040714
JP 2006528709	T	20061221	JP 2006-520827	20040714
US 2006179586	A1	20060817	US 2006-565137	20060119
PRAI EP 2003-102286	A	20030724		
WO 2004-EP51481	W	20040714		

OS CASREACT 142:204147; MARPAT 142:204147

GI

FAN.CNT 1

LA English

DT Patent

CODEN: BAKXDU

SO Brit. UK Pat. Appl., 126 pp.

PA Ciba Specialty Chemicals Holding Inc., Switz.

IN Eliu, Victor Paul; Froehling, Beate

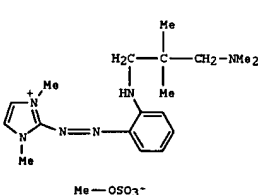
TI 1,3-Disubstituted 2-(phenylazo)imidazolium cationic direct dyes and

2-(2-fluorophenylazo)imidazole for hair dyes

AB The present invention relates to compns. thereof, especially comprising

other dyes, to processes for the preparation thereof and to the use thereof

in



Me-OSO3-

AB Cationic 1,3-disubstituted 2-(phenylazo)imidazolium cationic direct dyes and 2-(2-fluorophenylazo)imidazole dyes are presented for hair dye compns. Further, the present invention relates to compns. thereof, especially comprising

other dyes, to processes for the preparation thereof and to the use thereof

in

L6 ANSWER 11 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

(Continued)

the dyeing of org. material, such as keratin, wool, leather, silk, paper, cellulose or polyamides, esp. keratin-contg. fibers, cotton or nylon, and preferably human hair. Such compns. may comprise in addn. (a) at least a single further direct dye and/or an oxidative agent, (b) at least a single oxidative dye or (c) at least a single oxidative dye and an oxidative agent. Dye I was prepd. and soln. contg. I and Plantaren 2000 surfactant tested on human hair.

IT 836623-12-2P 836623-13-3P 836623-14-4P

836623-15-5P 836623-16-6P 836623-17-7P

836623-18-8P 836623-20-2P 836623-22-4P

836623-24-6P 836623-26-8P 836623-28-0P

836623-30-4P 836623-32-6P 836623-34-8P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological

study); PREF (Preparation); USES (Uses)

(1,3-disubstituted 2-(phenylazo)imidazolium cationic direct dyes and

2-(2-fluorophenylazo)imidazole for hair dyes)

RN 836623-12-2 CAPLUS

CN 1H-imidazolium, 2-[(2-aminophenyl)azo]-1,3-dimethyl-, methyl sulfate (9CI)

(CA INDEX NAME)

CH 1

CRN 836623-11-1

CMF C11 H14 N5

FAN.CNT 1

LA English

DT Patent

CODEN: BAKXDU

SO Brit. UK Pat. Appl., 126 pp.

PA Ciba Specialty Chemicals Holding Inc., Switz.

IN Eliu, Victor Paul; Froehling, Beate

TI 1,3-Disubstituted 2-(phenylazo)imidazolium cationic direct dyes and

2-(2-fluorophenylazo)imidazole for hair dyes

AB The present invention relates to compns. thereof, especially comprising

other dyes, to processes for the preparation thereof and to the use thereof

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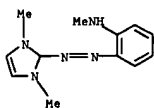
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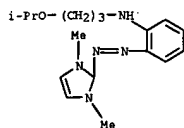
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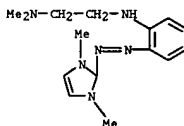
L6 ANSWER 11 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

● F⁻

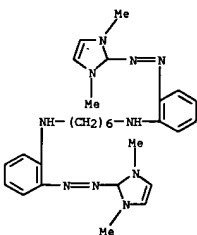
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 836623-14-4 CAPLUS
 CN 1H-imidazolium, 1,3-dimethyl-2-[[2-[[3-(1-methylethoxy)propyl]amino]phenyl]azo]-, fluoride (9CI) (CA INDEX NAME)

● F⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 836623-15-5 CAPLUS
 CN 1H-imidazolium, 2-[[2-[[2-(dimethylamino)ethyl]amino]phenyl]azo]-1,3-dimethyl-, fluoride (9CI) (CA INDEX NAME)

● F⁻

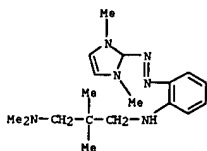
L6 ANSWER 11 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

● 2 F⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 836623-20-2 CAPLUS
 CN 1H-imidazolium, 2-[[2-[[3-(dimethylamino)-2,2-dimethylpropyl]amino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 836623-19-9
 CMF C18 H29 N6



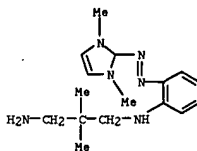
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

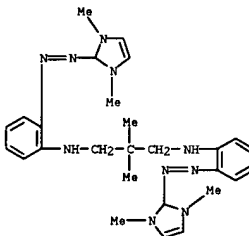
CRN 21228-90-0
 CMF C H3 O4 S

L6 ANSWER 11 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 836623-16-6 CAPLUS
 CN 1H-imidazolium, 2-[[2-[[3-amino-2,2-dimethylpropyl]amino]phenyl]azo]-1,3-dimethyl-, fluoride (9CI) (CA INDEX NAME)

● F⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 836623-17-7 CAPLUS
 CN 1H-imidazolium, 2,2'-[(2,2-dimethyl-1,3-propanediyl)bis(imino-2,1-phenyleneazo)]bis(1,3-dimethyl-, difluoride (9CI) (CA INDEX NAME)

● 2 F⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 836623-18-8 CAPLUS
 CN 1H-imidazolium, 2,2'-[1,6-hexanediylbis(imino-2,1-phenyleneazo)]bis(1,3-

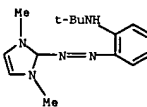
L6 ANSWER 11 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

Me-O-SO₃⁻

RN 836623-22-4 CAPLUS
 CN 1H-imidazolium, 2-[[2-[[1,1-dimethylethyl]amino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 836623-21-3
 CMF C15 H22 N5



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

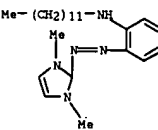
CRN 21228-90-0
 CMF C H3 O4 S

Me-O-SO₃⁻

RN 836623-24-6 CAPLUS
 CN 1H-imidazolium, 2-[[2-[[dodecylamino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 836623-23-5
 CMF C23 H38 N5



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0

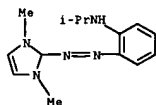
L6 ANSWER 11 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
CMF C H3 O4 S

Me-O-SO₃⁻

RN 836623-26-8 CAPLUS
CN 1H-imidazolium, 1,3-dimethyl-2-[[2-[(1-methylethyl)amino]phenyl]azo]-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 836623-25-7
CMF C14 H20 N5



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

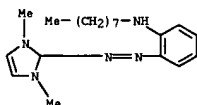
CRN 21228-90-0
CMF C H3 O4 S

Me-O-SO₃⁻

RN 836623-28-0 CAPLUS
CN 1H-imidazolium, 1,3-dimethyl-2-[[2-(octylamino)phenyl]azo]-, methyl sulfate (9CI) (CA INDEX NAME)

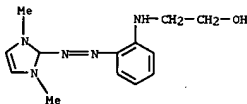
CM 1

CRN 836623-27-9
CMF C19 H30 N5



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 11 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

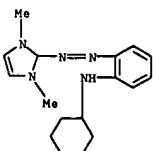
CRN 21228-90-0
CMF C H3 O4 S

Me-O-SO₃⁻

RN 836623-34-8 CAPLUS
CN 1H-imidazolium, 2-[[2-[(cyclohexylamino)phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 836623-33-7
CMF C17 H24 N5



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0
CMF C H3 O4 S

Me-O-SO₃⁻

IT 836623-36-0P
RI: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(1,3-disubstituted 2-(phenylazo)imidazolium cationic direct dyes and 2-(2-fluorophenylazo)imidazole for hair dyes)

L6 ANSWER 11 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CM 2

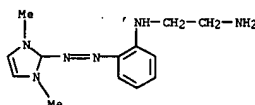
CRN 21228-90-0
CMF C H3 O4 S

Me-O-SO₃⁻

RN 836623-30-4 CAPLUS
CN 1H-imidazolium, 2-[[2-[(2-aminoethyl)amino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 836623-29-1
CMF C13 H19 N6



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0
CMF C H3 O4 S

Me-O-SO₃⁻

RN 836623-32-6 CAPLUS
CN 1H-imidazolium, 2-[[2-[(2-hydroxyethyl)amino]phenyl]azo]-1,3-dimethyl-, methyl sulfate (salt) (9CI) (CA INDEX NAME)

CM 1

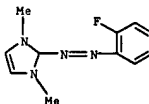
CRN 836623-31-5
CMF C13 H18 N5 O

L6 ANSWER 11 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 836623-36-0 CAPLUS
CN 1H-imidazolium, 2-[[2-(2-fluorophenyl)azo]-1,3-dimethyl-, methyl sulfate (9CI) (CA INDEX NAME)

CM 1

CRN 836623-35-9
CMF C11 H12 F N4



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0
CMF C H3 O4 S

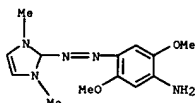
Me-O-SO₃⁻

RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 12 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2004:549442 CAPLUS
 DN 141:93976
 TI Oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compounds
 IN Mosler, Hinrich; Hoeffkes, Horst; Oberkobusch, Doris
 PA Henkel Kgaa, Germany
 SO Ger. Offen., 39 pp.
 CODEN: GWXXKX
 DT Patent
 LA German
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 10260881	A1	20040708	DE 2002-10260881	20021223
WO 2004058200	A1	20040715	WO 2003-EP13812	20031206

W: JP
 RV: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR
 EP 1575540 A1 20050921 EP 2003-795875 20031206
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, SG, CZ, EE, HU, SK
 PRAI DE 2002-10260881 A 20021223
 WO 2003-EP13812 W 20031206
 OS MARPAT 141:93976
 AB The invention concerns oxidative hair dyes that are composed of (A) primary amino group-containing chromophores that adsorb at 350-750 nm (B) reactive carbonyl compds.; (C) optionally CH-acidic group-containing compds., primary and secondary amines, hydroxyl compds. Direct dyes, color enhancers and surfactants can be added. Thus in a hair dyeing experiment 5 mmol 4-amino-4'-dimethylaminostilbene and 5 mmol glutaronaldehyde sodium salt were mixed with 5 mmol sodium acetate, one drop of 25% fatty alkyl sulfate solution and 50 mL water; pH was set to 6; a rusty red color was obtained.
 IT 161329-44-8
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (oxidative hair dyes composed of primary amino group-containing chromophores and reactive carbonyl compds.)
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2'-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

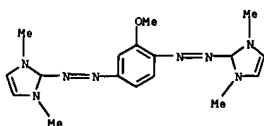


● C1

L6 ANSWER 13 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2004:482160 CAPLUS
 DN 141:42533
 TI Hair dyeing compositions comprising a cationic tertiary p-phenylenediamine with a pyrrolidine ring and a cationic heterocyclic direct dye
 IN Cotteret, Jean; Lagrange, Alain
 PA L'oreal, Fr.
 SO Eur. Pat. Appl., 104 pp.
 CODEN: EPXXDW
 DT Patent
 LA French
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1428505	A1	20040616	EP 2003-293130	20031212

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
 FR 2848439 A1 20040618 FR 2002-15772 20021213
 US 2004221399 A1 20041111 US 2003-735259 20031212
 US 7101406 B2 20060905
 US 2006112502 A1 20060601 US 2006-334169 20060117
 PRAI FR 2002-15772 A 20021213
 US 2003-44461P P 20030204
 US 2003-735259 A1 20031212
 OS MARPAT 141:42533
 AB Hair dyeing compns. comprise a cationic tertiary p-phenylenediamine with a pyrrolidine ring and a cationic heterocyclic direct dye. Thus, a composition contained oleic acid 9, polyglyceryl oleyl ether 12, diethylaminopropyl laurylammonosuccinamate sodium salt 3, ethoxylated oleylamine 7, ethoxylated alkyl ether monoethanolamide 10, ammonium acetate 20, propylene glycol 20, dilauroic acid 1.5, reducing agents 0.915, sequestrants 1, resorcinol 0.085, [1-(4-aminophenyl)pyrrolidin-3-yl]trimethylammonium chloride 1.0, 2-methyl-5-aminophenol 0.5, niacinamide 0.2, perfume qs, ammonia 10.2, and water qs to 100 g. The above composition (50 g) was mixed with oxygenated water and 0.2 g Basic Red-51.
 IT 478240-11-8
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (hair dyeing compns. comprising cationic tertiary phenylenediamine with pyrrolidine ring and cationic heterocyclic direct dye)
 RN 478240-11-8 CAPLUS
 CN 1H-imidazolium, 2,2'-[(2-methoxy-1,4-phenylene)bis(azo)]bis[1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

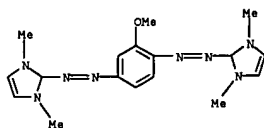
L6 ANSWER 12 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 14 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2002:964159 CAPLUS
 DN 138:28936
 TI Dyeing composition for keratinous fibers comprising a particular dicationic diazo dye
 IN Vidal, Laurent
 PA L'oreal, Fr.
 SO PCT Int. Appl., 36 pp.
 CODEN: PIXXDZ
 DT Patent
 LA French
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002100368	A1	20021219	WO 2002-FR1990	20020611

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MY, NZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, T2, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 FR 2825702 A1 20021213 FR 2001-7614 20010611
 FR 2825702 B1 20030808
 EP 1399117 A1 20040324
 EP 1399117 B1 20061102
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 BR 2002010997 A 20040608 BR 2002-10997 20020611
 CN 1541086 A 20041027 CN 2002-815752 20020611
 JP 2005516887 T 20050609 JP 2003-503192 20020611
 AT 344090 T 20061115 AT 2002-760357 20020611
 US 2004143911 A1 20040729 US 2004-480153 20040324
 US 6893471 B2 20050517
 PRAI FR 2001-7614 A 20010611
 WO 2002-FR1990 W 20020611
 OS MARPAT 138:28936
 AB The invention concerns a dyeing composition for dyeing keratinous fibers, in particular human keratinous fibers and more particularly hair, comprising a dicationic diazo dye as well as the dyeing method using same.
 IT 478240-11-8 478240-12-9 478240-13-0
 RL: COS (Cosmetic use); BIOL (Biological study); USES (Uses)
 (dyeing composition for keratinous fibers comprising particular dicationic diazo dye)
 RN 478240-11-8 CAPLUS
 CN 1H-imidazolium, 2,2'-[(2-methoxy-1,4-phenylene)bis(azo)]bis[1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

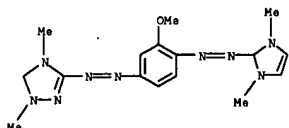
L6 ANSWER 14 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 478240-12-9 CAPLUS

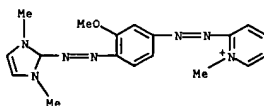
CN 1H-1,2,4-triazolium, 3-[[4-[(1,3-dimethyl-1H-imidazolium-2-yl)azo]-3-methoxyphenyl]azo]-1,4-dimethyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 478240-13-0 CAPLUS

CN Pyridinium, 2-[[4-[(1,3-dimethyl-1H-imidazolium-2-yl)azo]-3-methoxyphenyl]azo]-1-methyl- (9CI) (CA INDEX NAME)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 15 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2001:796234 CAPLUS

DN 135:348711

TI Oxidative hair dye compositions comprising 1-(4-aminophenyl)-pyrrolidine derivatives and a particular direct dye

IN Kravtchenko, Sylvain; Lagrange, Alain

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 100 pp.

CODEN: EPXKDW

DT Patent

LA French

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 1149575	A1	20011031	EP 2001-400879	20010405
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2807650	A1	20011019	FR 2000-4991	20000418
FR 2807650	B1	20020524		
JP 2001335446	A	20011204	JP 2001-120414	20010418
US 2002095732	A1	20020725	US 2001-836600	20010418
US 2003084516	A9	20030508		
PRAI FR 2000-4991	A	20000418		

OS MARPAT 135:348711

AB Oxidative hair dye compns. comprise 1-(4-aminophenyl)-pyrrolidine and a particular direct dye such as nitrobenzene derivs. or quaternary ammonium derivs. A hair dye contained 1-(4-aminophenyl)-pyrrolidine dihydrochloride 0.235, 2,4-diamino-1-(β-hydroxyethyloxy)-benzene dihydrochloride 0.241, Basic Red-51 0.168, excipients and water q.s. 100 g. Equal amount of the composition is mixed with 20 vol hydrogen peroxide

and

applied on the hair for 30 min, the hair is then rinsed, washed with a shampoo, rinsed, and dried.

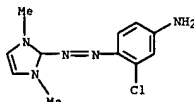
IT 73447-48-0 161329-44-8

RI: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(oxidative hair dye compns. comprising aminophenylpyrrolidine derivs. and particular direct dye)

RN 73447-48-0 CAPLUS

CN 1H-imidazolium, 2-[[4-amino-2-chlorophenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

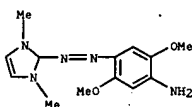
● Cl⁻

L6 ANSWER 15 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-44-8 CAPLUS

CN 1H-imidazolium, 2-[[4-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RE.CNT 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2000:529432 CAPLUS

DN 133:155126

TI Cationic dye compositions for keratin dyeing, and method and kit therefor

IN Rondeau, Christine

PA L'Oreal S. A., Fr.

SO Jpn. Kokai Tokkyo Koho, 52 pp.

CODEN: JXKXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 2000212052	A	20000802	JP 2000-11040	20000119
FR 2788432	A1	20000721	FR 1999-501	19990119
FR 2788432	B1	20030404		
EP 1025834	A1	20000809	EP 1999-403290	19991227
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
AU 726530	B2	20001109	AU 2000-10129	20000106
CN 1265307	A	20000906	CN 2000-101132	20000118
KR 2000057768	A	20000925	KR 2000-2237	20000118
HU 200000160	A2	20010228	HU 2000-160	20000118
BR 2000000740	A	20010502	BR 2000-740	20000118
RU 2200537	C2	20000320	RU 2000-101579	20000118
ZA 2000000213	A	20000719	ZA 2000-213	20000119
US 6432146	B1	20020813	US 2000-487665	20000119
PRAI FR 1999-501	A	19990119		

OS MARPAT 133:155126

AB The invention relates to a cationic dye composition for use for dyeing keratin

fiber, especially hair, providing long-lasting dyeing property, wherein the composition contains an arianor dye and addnl. specified cationic dye material.

A hair dye composition containing Arianor madder red 0.1 and

1,3-dimethyl-2-[[4-(methylamino)phenyl]azo]-1H-imidazolium chloride 0.1, hydroxyethyl cellulose 1, ethanol 10, 2-amino-2-methyl-1-propanol q.s. to pH 9, and water q.s. to 100 % was prepared

IT 73287-60-2 73447-48-0 161329-44-8

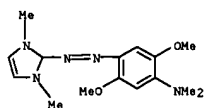
RI: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(keratin dye compns. containing arianor dyes and addnl. cationic dye materials)

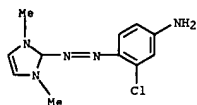
RN 73287-60-2 CAPLUS

CN 1H-imidazolium, 2-[[4-[(dimethylamino)-2,5-dimethoxyphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

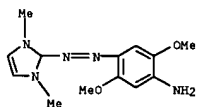
L6 ANSWER 16 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 73447-48-0 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

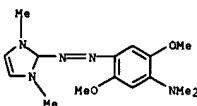
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

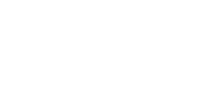
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 17 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2000:314347 CAPLUS
 DN 132:339027
 TI Hair dye compositions containing a cationic and an oxidative dye based on pyrazolo-(1,5-a)pyrimidines
 IN Audousset, Marie-Pascale
 PA L'Oreal, Fr.
 SO Eur. Pat. Appl., 96 pp.
 CODEN: EPXXIX
 DT Patent
 LA French
 FAN.CNT 1

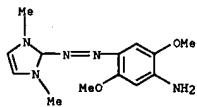
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 998908	A2	20000510	EP 1999-402549	19991015
EP 998908	A3	20000607		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2785183	A1	20000505	FR 1998-13866	19981104
FR 2785183	B1	20020405		
AU 9956006	A	20000525	AU 1999-56006	19991021
AU 730455	B2	20010308		
MX 9910062	A	20000930	MX 1999-10062	19991101
CN 1252988	A	20000517	CN 1999-123668	19991103
KR 2000035201	A	20000626	KR 1999-48337	19991103
HU 9904016	A2	20000828	HU 1999-4016	19991103
RU 2185811	C2	20020727	RU 1999-123528	19991103
JP 2000178147	A	20000627	JP 1999-314015	19991104
BR 9907313	A	20001219	BR 1999-7313	19991104
FR 1998-13866	A	19981104		
OS MARPAT 132:339027				
AB Hair dye compns. contain a cationic and an oxidative dye based on pyrazolo-(1,5-a)pyrimidines. Thus, a composition contained pyrazolo-(1,5-a)pyrimidine-3,7-diamine-ZHCl 0.333, imidazolium salt 1, EtOH 18, pentasodium diethylenetriaminopentaacetate 1.1, 20% NH3 10.0, and water 100 g.				
IT 73287-60-2				
267407-69-2				
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)				
(hair compns. containing cationic and oxidative dyes based on pyrazolopyrimidines)				
RN 73287-60-2 CAPLUS				
CN 1H-imidazolium, 2-[[4-(dimethylamino)-2,5-dimethoxyphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)				

● Cl⁻

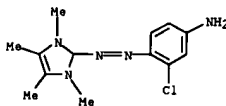
L6 ANSWER 16 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 267407-69-2 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3,4,5-tetramethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

L6 ANSWER 17 OF 46 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

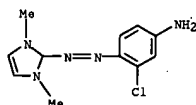
L6 ANSWER 18 OF 46 CAPLUS COPYRIGHT 2007 ACS ON STN
AN 2000:161104 CAPLUS
DN 132:198855
TI Hair dye composition containing direct cationic dyes and a silicone
IN Rondeau, Christine; Lang, Gerard; Cotteret, Jean
PA L'Oreal, Fr.
SO PCT Int. Appl., 121 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000012057	A1	20000309	WO 1999-FR1876	19990729
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2783416	A1	20000324	FR 1998-10724	19980826
FR 2783416	B1	20020503		
CA 2309302	A1	20000309	CA 1999-2309302	19990729
AU 9950462	A1	20000321	AU 1999-50462	19990729
AU 728730	B2	20010118		
BR 9906738	A	20000815	BR 1999-6738	19990729
EP 1049447	A1	20001108	EP 1999-934810	19990729
EP 1049447	B1	20050601		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
HU 200004429	A2	20010428	HU 2000-4429	19990729
JP 2002523441	T	20020730	JP 2000-567178	19990729
RU 2201201	C2	20030327	RU 2000-113071	19990729
AT 296609	T	20050615	AT 1999-934810	19990729
PT 1049447	T	20050930	PT 1999-934810	19990729
DE 29924813	U1	20051117	DE 1999-29924813	19990729
DE 29924812	U1	20051124	DE 1999-29924812	19990729
DE 29924815	U1	20051124	DE 1999-29924815	19990729
DE 29924820	U1	20051124	DE 1999-29924820	19990729
DE 29924825	U1	20051201	DE 1999-29924825	19990729
ES 2244203	T3	20051201	ES 1999-934810	19990729
AN 2000001564	A	20001025	ZA 2000-1564	20000328
US 2005086748	A1	20050428	US 2004-840953	20040507
JP 2005139196	A	20050602	JP 2004-370971	20041222
PRAI FR 1998-10724	A	19980826		
JP 2000-567178	A3	20020730		
WO 1999-FR1876	W	19990729		
US 2000-530198	B1	20000621		

OS MARPAT 132:198855
AB A dye composition for keratinous fibers, in particular human keratinous fibers
such as hair, comprises in an appropriate dyeing medium, at least a direct cationic dye of specific formula, and characterized in that it further contains at least a silicone selected among amine-containing silicones, polyalkylene silicones, silicone gums and resins. A hair dye preparation

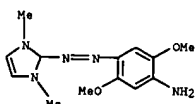
L6 ANSWER 18 OF 46 CAPLUS COPYRIGHT 2007 ACS ON STN (Continued)
containing 2-(p-dimethylaminophenylazo)-1,3-dimethylimidazolium chloride 0.10, 2-(p-aminophenylazo)-1,3-dimethylimidazolium chloride 0.1, ethoxylated nonylphenol 8.0, Q 2-8220 (amino-contg. polydimethylsiloxane) 1.2, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100 %. The compn. is applied on the hair for 30 min, then it is rinsed, washed with a shampoo, and dried to obtain a strong orange-red color.

IT 73447-48-0 161329-44-8
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair dye composition containing direct cationic dyes and silicone)
RN 73447-48-0 CAPLUS
CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RN 161329-44-8 CAPLUS
CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
RE.CNT 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

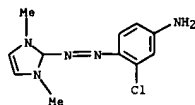
L6 ANSWER 19 OF 46 CAPLUS COPYRIGHT 2007 ACS ON STN
AN 2000:144696 CAPLUS
DN 132:185244
TI Hair dye composition containing direct cationic dyes and non-ionic surfactants
IN Lang, Gerard; Cotteret, Jean
PA L'Oreal, Fr.
SO PCT Int. Appl., 115 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000010519	A1	20000302	WO 1999-FR1875	19990729
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2782452	A1	20000225	FR 1998-10659	19980824
FR 2782452	B1	20011116		
CA 2305498	A1	20000302	CA 1999-2305498	19990729
AU 9950461	A1	20000314	AU 1999-50461	19990729
AU 739715	B2	20011018		
BR 9906737	A	20000815	BR 1999-6737	19990729
EP 1047389	A1	20001102	EP 1999-934809	19990729
EP 1047389	B1	20040707		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
HU 200100642	A2	20010730	HU 2001-642	19990729
JP 2002523346	T	20020730	JP 2000-565842	19990729
RU 2200538	C2	20030320	RU 2000-112879	19990729
AT 270541	T	20040715	AT 1999-934809	19990729
PT 1047389	T	20041130	PT 1999-934809	19990729
ES 2224683	T3	20050301	ES 1999-934809	19990729
ZA 2000001563	A	20001115	ZA 2000-1563	20000328
MX 200003802	A	20001113	MX 2000-3802	20000418
US 2006070191	A1	20060406	US 2005-121156	20050504
PRAI FR 1998-10659	A	19980824		
WO 1999-FR1875	W	19990729		
US 2000-530015	B1	20000525		

OS MARPAT 132:185244
AB A dye composition for keratinous fibers, in particular human keratinous fibers
such as hair, comprises in an appropriate dyeing medium, at least a direct cationic dye of specific formula, and characterized in that it further contains at least a non-ionic surfactant, such as alkylpolyglucosides. A hair dye preparation containing 2-(p-methylaminophenylazo)-1,3-dimethylimidazolium chloride 0.12, N-decanoyl-N-methylglucamine 8.0, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100 %. The composition is applied on the hair for 30 min, then it is rinsed, washed with a shampoo, and dried to obtain a strong red color.

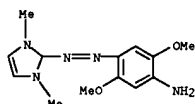
IT 73447-48-0 161329-44-8
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(hair dye composition containing direct cationic dyes and non-ionic surfactants)

L6 ANSWER 19 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 RN 73447-48-0 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

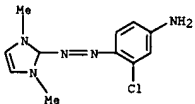
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

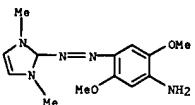
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 20 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (hair dye compns. contg. direct cationic dyes and anionic surfactants)
 RN 73447-48-0 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 20 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2000:144695 CAPLUS
 DN 132:185846
 TI Hair dye compositions containing direct cationic dyes and anionic surfactants
 IN Lang, Gerard; Cotteret, Jean
 FA L'Oreal, Fr.
 SO PCT Int. Appl., 112 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000010518	A1	20000302	WO 1999-FR1866	19990728
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
FR 2782450	A1	20000225	FR 1998-10546	19980819
FR 2782450	B1	20040827		
CA 2306408	A1	20000302	CA 1999-2306408	19990728
AU 9950455	A1	20000314	AU 1999-50455	19990728
AU 728715	B2	20010118		
BR 9906678	A	20000829	BR 1999-6678	19990728
EP 1047388	A1	20001102	EP 1999-934801	19990728
EP 1047388	B1	20040922		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
HU 200004836	A2	20010528	HU 2000-4836	19990728
JP 2002523345	T	20020730	JP 2000-565841	19990728
RU 2198651	C2	20030220	RU 2000-112411	19990728
AT 276727	T	20041015	AT 1999-934801	19990728
ES 2229740	T3	20050416	ES 1999-934801	19990728
ZA 2000001561	A	20001024	ZA 2000-1561	20000328
US 6530959	B1	20030311	US 2000-529769	20000622
US 2003172474	A1	20030918	US 2003-347870	20030122
PRAI FR 1998-10546	A	19980819		
WO 1999-FR1866	W	19990728		
US 2000-529769	A1	20000622		
OS MARPAT 132:198846				

AB A dye composition for keratinous fibers, in particular human keratinous fibers such as hair, comprises in an appropriate dyeing medium, at least a direct cationic dye of specific formula, and characterized in that it further contains at least an anionic surfactant, such as acylisethionate. A hair dye preparation contained 2-(p-methylaminophenylazo)-1,3-dimethylimidazolium chloride 0.20, triethanolamine cocoylglutamate 5.0, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100 %. The composition is applied on the hair for 30 min, then it is rinsed, washed with a shampoo, and dried to obtain a strong red color.

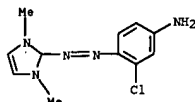
IT 73447-48-0 161329-44-8

L6 ANSWER 21 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2000:144694 CAPLUS
 DN 132:185243
 TI Hair dye compositions containing direct cationic dyes and quaternary ammonium salts
 IN Rondeau, Christine
 FA L'Oreal, Fr.
 SO PCT Int. Appl., 112 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000010517	A1	20000302	WO 1999-FR1865	19990728
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
FR 2782451	A1	20000225	FR 1998-10547	19980819
FR 2782451	B1	20040409		
CA 2305504	A1	20000302	CA 1999-2305504	19990728
AU 9950454	A1	20000314	AU 1999-50454	19990728
AU 729082	B2	20010125		
BR 9906730	A	20000822	BR 1999-6730	19990728
EP 1047387	A1	20001102	EP 1999-934800	19990728
EP 1047387	B1	20040908		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI			
HU 200004830	A2	20010528	HU 2000-4830	19990728
JP 2002523344	T	20020730	JP 2000-565840	19990728
RU 2197949	C2	20030210	RU 2000-112412	19990728
AT 275384	T	20040915	AT 1999-934800	19990728
PT 1047387	T	20050131	PT 1999-934800	19990728
ES 2229739	T3	20050416	ES 1999-934800	19990728
ZA 2000001562	A	20001024	ZA 2000-1562	20000328
MX 200003502	A	20001110	MX 2000-3502	20000410
US 2005071933	A1	20050407	US 2004-880615	20040701
US 7087096	B2	20060808		
US 2006156487	A1	20060720	US 2006-384520	20060321
PRAI FR 1998-10547	A	19980819		
WO 1999-FR1865	W	19990728		
US 2000-529835	B1	20000509		
US 2004-880615	A1	20040701		
OS MARPAT 132:185243				

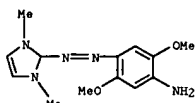
AB A dye composition for keratinous fibers, in particular human keratinous fibers such as hair, comprises in an appropriate dyeing medium, at least a direct cationic dye of specific formula, and characterized in that it further contains at least a quaternary ammonium salt. A hair dye preparation contained 2-(p-methylaminophenylazo)-1,3-dimethylimidazolium chloride 0.20, oleocetyltrimethyl hydroxyethylammonium 2.0, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100 %. The composition is applied on the hair for 30 min, then it is rinsed, washed with a shampoo, and dried to obtain a strong red color.

L6 ANSWER 21 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 IT 73447-48-0 161329-44-8
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (hair dye compns. containing direct cationic dyes and quaternary ammonium salts)
 RN 73447-48-0 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RE.CNT 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 22 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2000:34549 CAPLUS
 DN 132:97843
 TI Hair dye composition containing cationic direct dye and thickening polymer
 IN Rondeau, Christine
 PA L'Oreal, Fr.
 SO Eur. Pat. Appl., 64 pp.
 CODEN: EPXXDW
 DT Patent
 LA French
 FAN.CNT 1

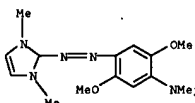
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 970687	A1	20000112	EP 1999-401580	19990624
EP 970687	B1	20050608		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2780881	A1	20000114	FR 1998-8833	19980709
AT 297182	T	20050615	AT 1999-401580	19990624
PT 970687	T	20051031	PT 1999-401580	19990624
ES 2244159	T3	20051201	ES 1999-401580	19990624
AU 9936806	A1	20000203	AU 1999-36806	19990628
AU 722556	B2	20000803		
ZA 9904283	A	20000110	ZA 1999-4283	19990630
KR 2000011486	A	20000225	KR 1999-26861	19990705
BR 9903124	A	20000530	BR 1999-3124	19990707
MX 9906367	A	20000309	MX 1999-6367	19990707
CN 1246330	A	20000308	CN 1999-111493	19990708
HU 9902334	A2	20000328	HU 1999-2334	19990708
HU 221413	B1	20020928		
RU 2185142	C2	20020720	RU 1999-115089	19990708
JP 2000063246	A	20000229	JP 1999-196817	19990709
US 2005235433	A1	20051027	US 2005-87013	20050323
FR 1998-8833	A	19980709		
US 1999-349105	B1	19990708		

PRAI FR 1998-8833
 AB Hair dye compns. containing a cationic direct dye and a sugar-containing polymer

as thickening agent are disclosed. A hair dye composition contained 2(p-(4-aminodimethylphenyl)azo)-1,3-dimethylimidazolium chloride 0.2, hydroxyethyl cellulose 1.0, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100%. The composition is applied on the hair for 30 min., then rinsed, washed with shampoo and dried to obtain a strong red color.

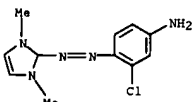
IT 73287-60-2 73447-48-0 161329-44-8
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (hair dye composition containing cationic direct dye and thickening polymer)
 RN 73287-60-2 CAPLUS
 CN 1H-imidazolium, 2-[(4-(dimethylamino)-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

L6 ANSWER 22 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



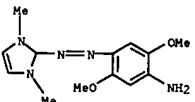
● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 73447-48-0 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

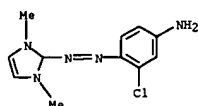
L6 ANSWER 23 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2000:34547 CAPLUS
 DN 132:97842
 TI Hair dye composition containing a cationic direct dye and a thickening polymer
 IN Rondeau, Christine; Lang, Gerard; Cotteret, Jean
 PA L'Oreal, Fr.
 SO Eur. Pat. Appl., 103 pp.
 CODEN: EPXXDW
 DT Patent
 LA French
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 970685	A1	20000112	EP 1999-401523	19990618
EP 970685	B1	20050601		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2780882	A1	20000114	FR 1998-8834	19980709
FR 2780882	B1	20010406		
AT 296608	T	20050615	AT 1999-401523	19990618
ES 2244158	T3	20051201	ES 1999-401523	19990618
ZA 9904142	A	19991223	ZA 1999-4142	19990623
AU 9936777	A1	20000203	AU 1999-36777	19990625
AU 723806	B2	20000907		
BR 9903081	A	20000509	BR 1999-3081	19990630
KR 9906255	A	20000731	KR 1999-6255	19990702
KR 2000011515	A	20000225	KR 1999-27052	19990706
CN 1246331	A	20000308	CN 1999-111494	19990708
HU 9902331	A2	20000328	HU 1999-2331	19990708
HU 221344	B1	20020928		
RU 2179436	C2	20020220	RU 1999-114774	19990708
JP 2000063248	A	20000229	JP 1999-229401	19990709
PRAI FR 1998-8834	A	19980709		

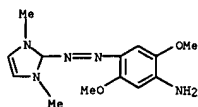
AB Hair dye compns. containing a cationic direct dye and a thickening polymer, such as polyacrylates, are disclosed. A hair dye composition contained 2(p-(4-aminodimethylphenyl)azo)-1,3-dimethylimidazolium chloride 0.2, acrylamide-ammonium acrylate copolymer (Bozopol C) 1.0, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100%. The composition is applied on the hair for 30 min., then rinsed with water, washed with shampoo and dried to obtain a strong orange color.

IT 73447-48-0 161329-44-8
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (hair dye composition containing cationic direct dye and thickening polymer)
 RN 73447-48-0 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

L6 ANSWER 23 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

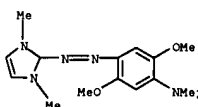
● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

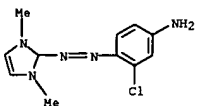
● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

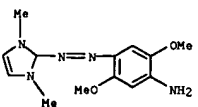
L6 ANSWER 24 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 CN 1H-imidazolium, 2-[(4-(dimethylamino)-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 73447-48-0 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 254111-15-4 CAPLUS

L6 ANSWER 24 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2000:34546 CAPLUS

DN 132:83378

TI Hair dye compositions containing a cationic direct dye and a thickening polymer

IN Lang, Gerard; Cotteret, Jean

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 105 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 970684	A1	20000112	EP 1999-401521	19990618
EP 970684	B1	20050608		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
FR 2780883	A1	20000114	FR 1998-8835	19980709
FR 2780883	B1	20010406		
AT 297181	T	20050615	AT 1999-401521	19990618
PT 970684	T	20050930	PT 1999-401521	19990618
ES 2244157	T3	20051201	ES 1999-401521	19990618
ZA 9904102	A	20000120	ZA 1999-4102	19990622
AU 9937966	A1	20000309	AU 1999-37966	19990702
AU 719497	B2	20000511		
BR 9903212	A	20000530	BR 1999-3212	19990705
KR 2000011517	A	20000225	KR 1999-27067	19990706
MX 9906325	A	20000331	MX 1999-6325	19990706
HU 9902330	A2	20000328	HU 1999-2330	19990708
HU 221345	B1	20020928		
CN 1248434	A	20000329	CN 1999-119515	19990708
RU 2180833	C2	20020327	RU 1999-115166	19990708
JP 2000086472	A	20000328	JP 1999-196815	19990709
US 2005144741	A1	20050707	US 2004-869058	20040617
JP 2004339236	A	20041202	JP 2004-233178	20040810
US 2006117497	A1	20060608	US 2006-339466	20060126
PRAI FR 1998-8835	A	19980709		
US 1999-350579	B1	19990708		
JP 1999-196815	A3	19990709		
US 2004-869058	A1	20040617		

OS MARPAT 132:83378

AB Hair dye compns. containing a cationic direct dye and a amphiphilic nonionic polymer as thickening agent are disclosed. A hair dye composition contained 2(p-(4-aminodimethyl)phenylazo)-1,3-dimethylimidazolium chloride 0.2, Et acrylate-methacrylic acid-stearth-10-allyl ether copolymer (Salcare 5C90) 1.0, ethanol 10, 2-amino-2-methyl-1-propanol q.s. pH = 9, and water q.s. 100%. The composition is applied on the hair for 30 min., then rinsed,

washed with shampoo and dried to obtain a strong orange color.

IT 73287-60-2 73447-48-0 161329-44-8

254111-15-4

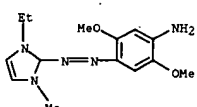
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye composition containing cationic direct dye and thickening polymer)

RN 73287-60-2 CAPLUS

L6 ANSWER 24 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1-ethyl-3-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 25 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:788350 CAPLUS

DN 132:26624

TI Hair dye compositions comprising a direct cationic dye and a substantive cationic or amphoteric polymer

IN Rondeau, Christine

PA Oreal S. A., Fr.

SO Fr. Demande, 68 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2776923	A1	19991008	FR 1998-4234	19980406
FR 2776923	B1	20030110		
EP 953334	A2	19991103	EP 1999-400711	19990323
EP 953334	A3	20000308		
EP 953334	B1	20041020		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

AT 279903	T	20041115	AT 1999-400711	19990323
PT 953334	T	20050331	PT 1999-400711	19990323
ES 2232091	T3	20050516	ES 1999-400711	19990323
ZA 9902429	A	19991008	ZA 1999-2429	19990330
AU 9922540	A	19991014	AU 1999-22540	19990330
AU 722097	B2	20000720		
CN 1233466	A	19991103	CN 1999-107305	19990401
HU 9900867	A2	19991228	HU 1999-867	19990402
JP 11343218	A	19991214	JP 1999-97574	19990405
BR 9901590	A	20000530	BR 1999-1590	19990405
MX 9903129	A	20000731	MX 1999-3129	19990405
RU 2160087	C1	20001210	RU 1999-107636	19990405
CA 2266053	A1	19991006	CA 1999-2266053	19990406
US 2002046432	A1	20020425	US 1999-287176	19990406
US 2003019053	A9	20030130		
US 2004148711	A1	20040805	US 2004-761213	20040122
JP 2006169262	A	20060529	JP 2006-60143	20060306
FR 1998-4234	A	19980405		
JP 1999-97574	A3	19990405		
US 1999-287176	B1	19990406		

OS MARPAT 132:26624

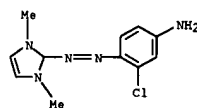
AB The title hair dye compns. are disclosed. A hair dye contained Me pyridinium N,N-dimethylbenzylidene derivative 0.09, a quaternary ammonium polymer 1.0, nonyl phenol containing 9 mols of ethylene oxide 8.0, 2-amino-2-Me propanol q.s. pH = 9, and water q.s. 100 g. The composition is applied on the hair for 30 min, then is washed with shampoo and dried to obtain a strong copper color.

IT 73447-48-0 161329-44-8
 RI: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye compns. comprising direct cationic dye and substantive cationic or amphoteric polymer)

RN 73447-48-0 CAPLUS
 CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

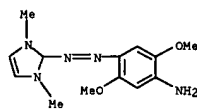
L6 ANSWER 25 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-44-8 CAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 26 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1999:783697 CAPLUS

DN 132:26629

TI hair dye compositions containing a direct cationic dye and a polyol and/or a polyolether

IN Rondeau, Christine

PA L'Oreal, Fr.

SO Eur. Pat. Appl., 54 pp.

CODEN: EPXXEW

DT Patent

LA French

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 962219	A2	19991208	EP 1999-401099	19990505
EP 962219	A3	20000308		
EP 962219	B1	20041006		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,

IE, SI, LT, LV, FI, RO

FR 2779055	A1	19991203	FR 1998-6751	19980528
FR 2779055	B1	20010504		
AT 278378	T	20041015	AT 1999-401099	19990505
PT 962219	T	20050228	PT 1999-401099	19990505
ES 2230815	T3	20050501	ES 1999-401099	19990505
DE 29924814	U1	20051117	DE 1999-29924814	19990505
DE 29924817	U1	20051124	DE 1999-29924817	19990505
DE 29924818	U1	20051124	DE 1999-29924818	19990505
DE 29924819	U1	20051124	DE 1999-29924819	19990505
ZA 9903199	A	19991115	ZA 1999-3199	19990510
AU 9928082	A	19991209	AU 1999-28082	19990512
AU 722600	B2	20000810		
MX 9904753	A	20000831	MX 1999-4753	19990521
BR 9901829	A	20000530	BR 1999-1829	19990525
CA 2273416	A1	19991128	CA 1999-2273416	19990527
CA 2273416	C	20061212		
CN 1237409	A	19991208	CN 1999-109246	19990527
HU 9901746	A2	20000728	HU 1999-1746	19990527
RU 2166930	C2	20010520	RU 1999-111265	19990527
JP 11349458	A	19991221	JP 1999-149113	19990528
JP 3814442	B2	20060830		
US 2002002748	A1	20020110	US 1999-321890	19990528
US 6436153	B2	20020820		
FR 1998-6751	A	19980528		

OS MARPAT 132:26629

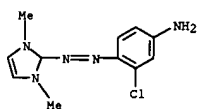
AB The title hair dye compns. are disclosed. A hair dye contained an azoaniline-containing imidazolium compound 0.2, propylene glycol 10.0, 2-amino-2-Me propanol q.s. pH = 9, and water q.s. 100 g. The composition is applied on the hair for 30 min, then is rinsed and washed with a shampoo and dried to obtain a strong orange color.

IT 73447-48-0 161329-44-8
 RI: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(hair dye compns. containing direct cationic dye and polyol and/or polyolether)

RN 73447-48-0 CAPLUS
 CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

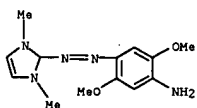
L6 ANSWER 26 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-44-8 CAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 27 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1999:468546 CAPLUS
 DN 131:120593
 TI Oxidative hair dye compositions containing a laccase and cationic dyes
 IN Lang, Gerard; Cotteret, Jean
 PA L'Oreal, Fr.
 SO PCT Int. Appl., 82 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9936034	A1	19990722	WO 1998-FR2752	19981216
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2773471	A1	19990716	FR 1998-248	19980113
FR 2773471	B1	20010413		
CA 2315921	A1	19990722	CA 1998-2315921	19981216
AU 9917646	A	19990802	AU 1999-17646	19981216
AU 728743	B2	20010118		
BR 9814732	A	20001017	BR 1998-14732	19981216
EP 1047376	A1	20001102	EP 1998-962481	19981216
EP 1047376	B1	20010523		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
ES 2159195	T3	20010916	ES 1998-962481	19981216
PT 1047376	T	20011030	PT 1998-962481	19981216
JP 2002509086	T	20020326	JP 2000-539810	19981216
RU 2202333	C2	20030420	RU 2000-121054	19981216
GR 3036415	T3	20011130	GR 2001-401266	20010820
US 200519503	A1	20050908	US 2005-60579	20050218
PRAI WO 1998-248	A	19980113		
US 1998-FR2752	W	19981216		
US 2000-600129	B1	20000911		

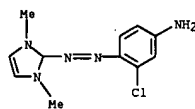
OS MARPAT 131:120593
 AB A ready-to-use oxidative hair dye composition contains 1 oxidation dye, at least 1 cationic direct dye and at least an enzyme such as laccase. Thus, a hair dye composition contained p-phenylenediamine 0.283, 5-N-(p-hydroxyethylamino)-2-methylphenol 0.283, a cationic dye, Basic Red-76 0.094, laccase (180 U/mg) of Rhus vernicifera 1.8 and water to 100 g. This composition also contained a mixture of Oramix 4.8 g and EtOH 20.0 g and the pH was adjusted to 6.5.
 IT 7347-48-0 161329-44-8
 RI: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (oxidative hair dye compns. containing laccase and cationic dyes)
 RN 7347-48-0 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride

L6 ANSWER 28 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1999:282059 CAPLUS
 DN 130:316429
 TI Oxidative hair dye comprising a direct cationic dye and a direct nitrated benzene dye
 IN Rondeau, Christine
 PA L'Oreal, Fr.
 SO PCT Int. Appl., 74 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9920235	A1	19990429	WO 1998-FR2145	19981007
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2275938	A1	19990429	CA 1998-2275938	19981007
CA 2275938	C	20070102		
AU 9894474	A	19990510	AU 1998-94474	19981007
AU 730009	B2	20010222		
BR 9806716	A	20000404	BR 1998-6716	19981007
JP 2000505841	T	20000516	JP 1999-523337	19981007
JP 3609428	B2	20050112		
EP 999823	A1	20000517	EP 1998-947623	19981007
EP 999823	B1	20040616		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
HU 200001439	A2	20000928	HU 2000-1439	19981007
NZ 336320	A	20010223	NZ 1998-336320	19981007
RU 2168328	C2	20010610	RU 1999-116254	19981007
EP 1437123	A1	20040714	EP 2004-290396	19981007
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 269050	T	20040715	AT 1998-947623	19981007
PT 999823	T	20041130	PT 1998-947623	19981007
ES 2224435	T3	20050301	ES 1998-947623	19981007
NO 9903053	A	19990820	NO 1999-3053	19990621
NO 319717	B1	20050905		
US 2002004956	A1	20020117	US 1999-331252	19990816
US 2003000023	A9	20030102		
US 6712861	B2	20040330		
NO 2005000873	A	19990820	NO 2005-873	20050218
PRAI FR 1997-13240	A	19971022		
EP 1998-947623	A3	19981007		
WO 1998-FR2145	W	19981007		

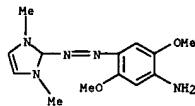
OS MARPAT 130:316429
 AB A ready-to-use composition for dyeing keratin fibers, and in particular human keratin fibers such as hair comprising, in an appropriate dyeing medium, at least a direct cationic dye properly selected, and at least a direct nitrated benzene dye, and the dyeing method using said composition are disclosed. A hair dye composition contained 2-amino-5-hydroxy nitrobenzene 0.35, a direct cationic orange dye 0.065, water and excipients q.s. 100g. The composition is applied on the hair for 30 min, then washed and dried to

L6 ANSWER 27 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 (9CI) (CA INDEX NAME)



• Cl⁻

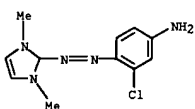
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



• Cl⁻

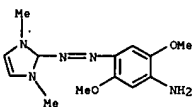
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 28 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 IT 7347-48-0 161329-44-8
 RI: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (oxidative hair dye comprising direct cationic dye and direct nitrated benzene dye)
 RN 7347-48-0 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



• Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



• Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 29 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1999:282058 CAPLUS
 DN 130:316428
 TI Oxidative hair dye comprising a cationic direct dye and an auto-oxidizable dye
 IN Lang, Gerard; Audousset, Marie-Pascale
 PA L'Oreal, Fr.
 SO PCT Int. Appl., 70 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9920234	A1	19990429	WO 1998-FR2144	19981007
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2275364	A1	19990429	CA 1998-2275364	19981007
AU 9894473	A	19990510	AU 1998-94473	19981007
AU 730008	B2	20010222		
EP 971682	A1	20000119	EP 1998-947622	19981007
EP 971682	B1	20040317		
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, NL, SE				
BR 9806825	A	20000425	BR 1998-6825	19981007
JP 2000516265	T	20001205	JP 1999-523336	19981007
RU 2168978	C2	20010620	RU 1999-116255	19981007
AT 261717	T	20040415	AT 1998-947622	19981007
ES 2218854	T3	20041116	ES 1998-947622	19981007
US 6503283	B1	20030107	US 1999-331251	19990618
PRAI FR 1997-13242	A	19971022		
WO 1998-FR2144	W	19981007		

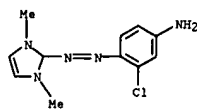
OS MARPAT 130:316428
 AB A ready-to-use composition for dyeing keratin fibers, and in particular human keratin fibers such as hair comprising, in an appropriate dyeing medium, at least a cationic direct dye, and at least an auto-oxidizable dye, and the dyeing method using said composition is disclosed. A hair dye composition contained 5,6-dihydroxyindoline hydrobromide 0.7, cationic direct Basic Red 76 0.1, water and excipients q.s. 100%. The composition is applied on the hair for 30 min, then washed and dried to obtain a red blond color.
 IT 73447-48-0 161329-44-8
 RI: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (oxidative hair dye comprising cationic direct dye and auto-oxidizable dye)
 RN 73447-48-0 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

L6 ANSWER 30 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1999:244546 CAPLUS
 DN 130:301479
 TI Oxidative hair dye compositions containing oxidoreductase-type enzymes, oxidation bases, and direct cationic dyes
 IN De La Mettrie, Roland; Cotteret, Jean; De Labbey, Arnaud; Maubru, Mireille
 PA L'Oreal, Fr.
 SO PCT Int. Appl., 83 pp.
 CODEN: PIXXD2
 DT Patent
 LA French
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9917730	A1	19990415	WO 1998-FR2075	19980928
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2769213	A1	19990409	FR 1997-12353	19971003
FR 2769213	B1	19991217		
CA 2272004	A1	19990415	CA 1998-2272004	19980928
AU 9893539	A	19990427	AU 1998-93539	19980928
AU 732773	B2	20010426		
EP 969798	A1	20000112	EP 1998-946516	19980928
EP 969798	B1	20030723		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
BR 9806205	A	20000215	BR 1998-6205	19980928
JP 2000507987	T	20000627	JP 1999-521117	19980928
JP 3814304	B2	20000830		
HU 200001335	A2	20000928	HU 2000-1335	19980928
NZ 335513	A	20001222	NZ 1998-335513	19980928
RU 2167646	C2	20010527	RU 1999-114007	19980928
AT 245408	T	20030815	AT 1998-946516	19980928
ES 2205548	T3	20040501	ES 1998-946516	19980928
MX 9904998	A	20000228	MX 1999-4998	19990528
NO 9902646	A	19990712	NO 1999-2646	19990601
US 6283129	B1	20010508	US 1999-319166	19990701
PRAI FR 1997-12353	A	19971003		
WO 1998-FR2075	W	19980928		

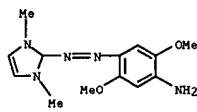
OS MARPAT 130:301479
 AB A ready-to-use oxidation dyeing composition for keratin fibers, and in particular for human keratin fibers such as hair comprise, in a medium appropriate for dyeing at least an oxidation base, at least a direct cationic dye, and at least an oxidoreductase-type enzyme with 2 electrons in the presence of at least a donor for said enzyme. A hair dye composition contained para-phenylenediamine 0.7, 2-(4-methylaminophenylazo)-1,3-dimethylimidazolium chloride 0.6, uricase (20 IU/mg) 1.5, uric acid 1.5, excipients and water q.s. 100 g.
 IT 73287-60-2 73447-48-0 161329-44-8
 RI: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (oxidative hair dye compns. containing oxidoreductase-type enzymes, oxidation

L6 ANSWER 29 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

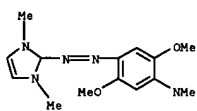


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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

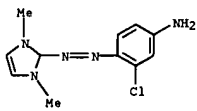
L6 ANSWER 30 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

RN 73287-60-2 CAPLUS
 CN 1H-imidazolium, 2-[(4-(dimethylamino)-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



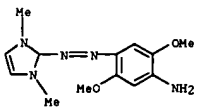
● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 73447-48-0 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

L6 ANSWER 30 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 31 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1998:586776 CAPLUS
 DN 129:166068
 TI Oxidative dye composition for keratin fibers and method for dyeing
 IN Rondeau, Christine; Cotteret, Jean; De la Mettrie, Roland
 PA L'Oreal S. A., Fr.
 SO Fr. Demande, 50 pp.
 CODEN: FRXXBL
 DT Patent
 LA French
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2757385	A1	19980626	FR 1996-15892	19961223
FR 2757385	B1	19990129		
EP 850636	A1	19980701	EP 1997-402834	19971125
EP 850636	B1	19990506		

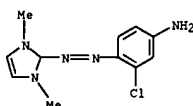
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

AT 179592	T	19990515	AT 1997-402834	19971125
ES 2134055	T3	19990916	ES 1997-402834	19971125
AU 9747629	A	19980625	AU 1997-47629	19971209
AU 694398	B2	19980715		
ZA 9711240	A	19980623	ZA 1997-11240	19971215
CZ 291838	B6	20030618	CZ 1997-4077	19971217
BR 9706295	A	19990504	BR 1997-6295	19971218
HU 9702512	A1	19990128	HU 1997-2512	19971219
HU 224430	B1	20050928		
US 5919273	A	19990706	US 1997-994127	19971219
CA 2223726	A1	19980623	CA 1997-2223726	19971222
JP 10182378	C	20030211		
JP 2968243	B2	19991025	JP 1997-353833	19971222
CN 1189332	A	19980805	CN 1997-120861	19971222
CN 1189333	A	19980805	CN 1997-120883	19971222
CN 1145473	B	20040414		
RU 2160086	C2	20001210	RU 1997-122261	19971222
PL 188695	B1	20050331	PL 1997-323987	19971222

PRAI FR 1996-15892
 OS MARPAT 129:166068
 AB Oxidative dye compns. for keratin fibers, especially for human hair, comprise

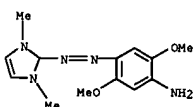
≥1 oxidation base, ≥1 coupler based on m-aminophenol derivs.,
 ≥1 cationic direct dye containing an azo, ethylenic or CH=N linkage and
 a cationic nitrogen-containing ring, and ≥1 oxidizing agent. A method
 for dyeing and a kit for packaging the hair dye are claimed. The
 oxidative dye composition enables rich coloration with good shine and
 durability. Thus, a dye composition was prepared containing oxidation bases
 p-tolylendiamine and p-aminophenol, 5-N-[8-hydroxyethyl]amino-2-
 methylphenol as coupler, and 4-[(1,3-dimethylimidazolium-2-yl)azo]-N,N-
 dimethylaniline chloride as cationic direct dye. At time of use, the dye
 composition was combined with a hydrogen peroxide solution. Natural gray
 hair was dyed with the above composition by applying the composition for 30 and min
 and then rinsing and shampooing. The dyed hair was a deep blond with intense red
 highlights.

L6 ANSWER 31 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 IT 73447-48-0 161329-44-8
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (cationic direct dye; oxidative dye composition providing good color and
 durability for keratin fibers, especially hair)
 RN 73447-48-0 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride
 (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-,
 chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 32 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1998:586775 CAPLUS
 DN 129:166067
 TI Oxidative dye compositions for keratin fibers and dyeing method
 IN Rondeau, Christine; Cotteret, Jean; De la Mettrie, Roland
 PA L'Oreal S. A., Fr.
 SO Fr. Demande, 51 pp.
 CODEN: FRXXBL
 DT Patent
 LA French
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2757384	A1	19980626	FR 1996-15891	19961223
FR 2757384	B1	19990115		
EP 850637	A1	19980701	EP 1997-402848	19971126
EP 850637	B1	19990602		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

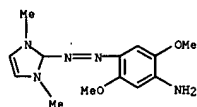
AT 180664	T	19990615	AT 1997-402848	19971126
ES 2134672	T3	19991001	ES 1997-402848	19971126
AU 9747632	A	19980625	AU 1997-47632	19971209
AU 705812	B2	19990603		
ZA 9711241	A	19980626	ZA 1997-11241	19971215
CZ 291831	B6	20030618	CZ 1997-4079	19971217
US 5993490	A	19991130	US 1997-994130	19971219
CA 2222851	A1	19980623	CA 1997-2222851	19971222
CA 2222851	C	20030211		
JP 10218746	A	19980818	JP 1997-353834	19971222
JP 2954121	B2	19990927		
CN 1192356	A	19980909	CN 1997-120896	19971222
CN 1119988	B	20030903		
HU 9702528	A1	19990128	HU 1997-2528	19971222
RU 2160084	C2	20001210	RU 1997-121288	19971222
PL 189005	B1	20050531	PL 1997-323984	19971222
BR 9706327	A	19990504	BR 1997-6327	19971223

PRAI FR 1996-15891
 OS MARPAT 129:166067
 AB Oxidative dye compns. for keratin fibers, particularly human hair,
 contain, ≥1 oxidation base based on p-phenylenediamine and/or
 bisphenylalkylenediamines or their acid salts, ≥1 m-diphenol (e.g.,
 resorcinol derivs.) or their acid salts, ≥1 cationic direct dye
 based on cationic nitrogen-containing heterocycle derivs., and ≥1
 oxidizing agent. A dyeing method and kit design for packaging the hair
 dye are also claimed. The dye composition enables good coloration with good
 luminisescence which exhibits good shampoo resistance. Thus, a dye
 composition

of p-phenylenediamine, 1,3-dihydroxybenzene, 1-methyl-4-
 carboxaldehyde-pyridinium methylphenylhydrazones methosulfate and
 N-[(1,3-dimethylimidazolium-2-yl)azophenyl]-p-phenylenediamine chloride
 was mixed with hydrogen peroxide and applied for 39 min to naturally gray
 hair. The dyed hair exhibited a deep chestnut color and exhibited good
 shampoo resistance.

IT 161329-44-8
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES
 (Uses)
 (cationic direct dye; oxidative hair dye compns. with good coloration
 and shampoo resistance)
 RN 161329-44-8 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-,
 chloride (9CI) (CA INDEX NAME)

L6 ANSWER 32 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 33 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1998:577128 CAPLUS

DN 129:166070

TI Oxidative dye compositions containing cationic direct colorants for keratin fibers and dyeing method

IN Rondeau, Christine; Cotteret, Jean; De la Mettrie, Roland

PA L'Oreal S. A., Fr.

SO Fr. Demande, 69 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2757388	A1	19980626	FR 1996-15895	19961223
FR 2757388	B1	19991112		
EP 850638	A1	19980701	EP 1997-402863	19971127
EP 850638	B1	19990901		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 183917	T	19990915	AT 1997-402863	19971127
ES 2138855	T3	20000116	ES 1997-402863	19971127
AU 693751	B1	19980702	AU 1997-47631	19971209
ZA 9711309	A	19980623	ZA 1997-11309	19971217
CZ 291688	B6	20030514	CZ 1997-4076	19971217
US 6001135	A	19991214	US 1997-994444	19971219
CA 2222852	A1	19980623	CA 1997-2222852	19971222
CA 2222852	C	20030408		
JP 10182379	A	19980707	JP 1997-353836	19971222
JP 2974645	B2	19991110		
HU 9702527	A1	19990128	HU 1997-2527	19971222
HU 222611	B1	20030929		
RU 2160085	C2	20001210	RU 1997-121289	19971222
BR 9706323	A	19990504	BR 1997-6323	19971223
GR 3031724	T3	20000229	GR 1999-402816	19991103
PRAI FR 1996-15895	A	19961223		
OS MARPAT 129:166070				

AB The title oxidative dye compns., especially for dyeing hair, contain ≥ 1 oxidation base, ≥ 1 cationic direct colorant based on substituted nitrogen-containing heterocycle derivs. having N=H, CH=CH or N=CH linkages, and ≥ 1 oxidizing agent. The dye compns. enable formation of a wide range of colors and provide rich coloration with good shine and durability. Thus, an oxidative dye composition was formulated from p-phenylenediamine and 4-[(1,3-dimethylimidazolium-2-ylazo)-N,N-dimethylaniline chloride. During application, the dye composition was mixed with hydrogen peroxide as oxidizing agent. The composition was applied 30

min to naturally gray hair and then rinsed and shampooed off. The treated hair had an intense red nuance which was resistant to subsequent shampooing.

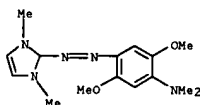
IT 73287-60-2 73447-48-0 161329-44-8

RL: BUU (Biological use, unclassified); BIOL (Biological study); USES

(cationic direct colorant; oxidative hair dye compns. containing cationic direct colorants with good coloration, shine, and shampoo resistance)

RN 73287-60-2 CAPLUS

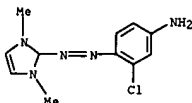
CN 1H-imidazolium, 2-[[4-(dimethylamino)-2,5-dimethoxyphenyl]azo]-1,3-

L6 ANSWER 33 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
dimethyl-, chloride (9CI) (CA INDEX NAME)● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-44-8 CAPLUS

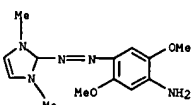
CN 1H-imidazolium, 2-[[4-(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-44-8 CAPLUS

CN 1H-imidazolium, 2-[[4-(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 34 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1998:571217 CAPLUS

DN 129:166069

TI Oxidative dye compositions for keratin fibers and method for dyeing

IN Rondeau, Christine; Cotteret, Jean; De la Mettrie, Roland

PA L'Oreal S. A., Fr.

SO Fr. Demande, 39 pp.

CODEN: FRXXBL

DT Patent

LA French

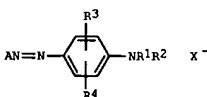
FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2757387	A1	19980626	FR 1996-15894	19961223
FR 2757387	B1	19990129		
EP 852135	A1	19980708	EP 1997-402864	19971127
EP 852135	B1	19990428		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 179325	T	19990515	AT 1997-402864	19971127
ES 2134056	T3	19990916	ES 1997-402864	19971127
AU 694083	B1	19980709	AU 1997-47630	19971209
ZA 9711308	A	19980701	ZA 1997-11308	19971217
CZ 291830	B6	20030618	CZ 1997-4078	19971217
US 5879412	A	19990309	US 1997-994446	19971219
CA 2223722	A1	19980623	CA 1997-2223722	19971222
CA 2223722	C	20030318		
JP 10194942	A	19980728	JP 1997-353835	19971222
JP 2954122	B2	19990927		
CN 1189331	A	19980805	CN 1997-120860	19971222
CN 1119987	B	20030903		
HU 9702529	A1	19990128	HU 1997-2529	19971222
HU 220160	B	20011128		
BR 9706312	A	19990504	BR 1997-6312	19971222
RU 2177305	C2	20011227	RU 1997-121232	19971222
FL 188879	B1	20050531	FL 1997-323985	19971222
PRAI FR 1996-15894	A	19961223		
OS MARPAT 129:166069				
GI				

AB The title oxidative dye compns., especially for human keratinous fibers

such as

hair, contain ≥ 1 oxidation base chosen from p-phenylenediamines, bisphenylalkylenediamines, and their acid salts; ≥ 1 coupler chosen from m-phenylenediamines and their acid salts; and ≥ 1 cationic direct colorant I (R1 = H or Cl-4 alkyl; R2 = H, alkyl optionally cyano- or amine-substituted, 4-aminophenyl, or forms with R1 a heterocycle; R3 and R4 = independently H, halogen, Cl-4 alkyl, Cl-4 alkoxy, or cyano; X =



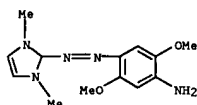
AB The title oxidative dye compns., especially for human keratinous fibers

such as

hair, contain ≥ 1 oxidation base chosen from p-phenylenediamines, bisphenylalkylenediamines, and their acid salts; ≥ 1 coupler chosen from m-phenylenediamines and their acid salts; and ≥ 1 cationic direct colorant I (R1 = H or Cl-4 alkyl; R2 = H, alkyl optionally cyano- or amine-substituted, 4-aminophenyl, or forms with R1 a heterocycle; R3 and R4 = independently H, halogen, Cl-4 alkyl, Cl-4 alkoxy, or cyano; X =

L6 ANSWER 34 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 anion, chosen, preferably from Cl⁻, MeOSO₃⁻, and AcO⁻; A = a substituted cationic nitrogenous heterocycle; and X = oxidizing agent. The dye compns. enables a rich coloration with good gloss, good properties and durability. Thus, an oxidative dye compn. was formed from p-phenylenediamine, 2,4-diamino-1-(2-hydroxyethoxy)benzene dihydrochloride and direct cationic colorant I where R₁, R₃, R₄ = H, R₂ = 4-aminophenyl, A = 1,3-dimethylimidazolium-2-yl, and X = Cl⁻ using hydrogen peroxide as the oxidizing agent. The compn. was applied to natural gray hair for 30 min to give hair with a luminous chestnut ash tint. The color was resistant to several subsequent shampoos.

IT 161329-44-8
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (cationic direct colorant; oxidative hair dye compns. with good shine and shampoo resistance)
 RN 161329-44-8 CAPLUS
 CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

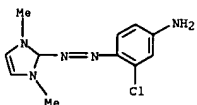
L6 ANSWER 35 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1995:394987 CAPLUS
 DN 122:169673
 TI Hair dyeing preparations containing cationic dyes
 IN Moeckli, Peter
 PA Ciba-Geigy A.-G., Switz.
 SO PCT Int. Appl., 40 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9501772	A1	19950119	WO 1994-EP2077	19940627
W: AM, AU, BB, BG, BR, BY, CA, CN, CZ, FI, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LV, MD, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SI, SK, TJ, TT, UA, US, UZ, VN				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2142091	A1	19950119	CA 1994-2142091	19940627
CA 2142091	C	20010529		
AU 9473448	A	19950206	AU 1994-73448	19940627
AU 687849	B2	19980305		
EP 658095	A1	19950621	EP 1994-922240	19940627
EP 658095	B1	20010829		
R: CH, DE, ES, FR, GB, IT, LI				
CN 1111444	A	19951108	CN 1994-190428	19940627
CN 1065743	B	20010516		
JP 08501322	T	19960213	JP 1994-503794	19940627
BR 9405500	A	19990908	BR 1994-5500	19940627
ES 2161775	T3	20011216	ES 1994-922240	19940627
JP 3281386	B2	20020513	JP 1995-503794	19940627
US 5733343	A	19980331	US 1996-756448	19961126
PRAI CH 1993-2020	A	19930705		
WO 1994-EP2077	W	19940627		
US 1995-392783	B1	19950228		
MARPAT 122:169673				

AB Keratin-containing fibers, in particular human hair, are dyed using cationic dyes (Markush structure given). Human hair was dyed with a dye emulsion containing 4-(2-methyl-2-phenylhydrazinylidene)-1-methylpyridinium chloride 1, excipients and water q.s. 100% to obtain an intensive brilliant yellow color which was many times stronger than a color obtained with Basic Yellow 57 in the same way.

IT 73447-48-0 161329-44-8
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
 (hair dyeing preps. containing cationic dyes)
 RN 73447-48-0 CAPLUS
 CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

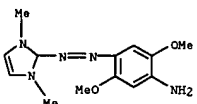
L6 ANSWER 35 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 161329-44-8 CAPLUS
 CN 1H-Imidazolium, 2-[(4-amino-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

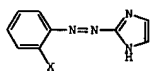


● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

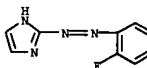
L6 ANSWER 36 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1981:515558 CAPLUS
 DN 95:115558
 TI Diuretic and hypotensive 2-[(2-halophenyl)azo]-1H-imidazoles
 PA Mochida Pharmaceutical Co., Ltd., Japan
 SO Jpn. Kokai Tokkyo Koho, 3 pp.
 CODEN: JKXKAF
 DT Patent
 LA Japanese
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56053658	A	19810513	JP 1979-130245	19791009
PRAI JP 1979-130245	A	19791009		
OS CASREACT 95:115558				
GI				



AB 2-[(2-Halophenyl)azo]-1H-imidazoles I (X = F, Cl, Br, Iodo), were prepared by diazotizing o-haloanilines followed by condensation with imidazole. I (X = F, Cl) showed diuretic activity approx. equal to that of furosemide.

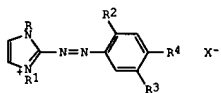
IT 66963-85-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (preparation, diuretic, and hypotensive activity of)
 RN 66963-85-7 CAPLUS
 CN 1H-Imidazole, 2-[(2-fluorophenyl)azo]- (9CI) (CA INDEX NAME)



L6 ANSWER 37 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1980:409557 CAPLUS
 DN 93:9557
 TI Cationic dyes
 IN Kuehlthau, Hans Peter
 PA Bayer A.-G., Fed. Rep. Ger.
 SO Ger. Offen., 15 pp.
 CODEN: GWXXEX
 DT Patent
 LA German
 FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 2837953	A1	19800313	DE 1978-2837953	19780831
GB 2029439	A	19800319	GB 1979-29916	19790829
GB 2029439	B	19830202		
JP 55034298	A	19800310	JP 1979-109797	19790830
FR 2434847	A1	19800328	FR 1979-21771	19790830
PRAI DE 1978-2837953	A	19780831		

GI



AB Dyes of general structure I, useful for dyeing acrylic fibers in fast reddish shades, were prepared, where R and R1 (independently) = lower alkyl, alkenyl, or hydroxyalkyl, R2 = lower alkyl, alkenyl, or alkoxy, R3 = H, halogen, lower alkyl, alkenyl, or alkoxy, R4 = NMe2, X- = anion. Thus, I (R = R1 = R2 = Me, R3 = H, R4 = X = Cl) [73754-09-3] was mixed with HCl and Me2NH solution, treated with enough Me2NH at 90° to give complete conversion, diluted with NaCl solution, and adjusted to pH 5 with HCl to give I.

(R = R1 = R2 = Me, R3 = H, R4 = NMe2, X = Cl) (II) [73754-08-2], which dyed acrylic fibers in fast bluish red shades. II was also prepared by reaction of I (R = R1 = R2 = Me, R3 = R4 = H, X = Cl) [73754-10-6] with Me2NH solution at room temperature while passing atmospheric O through the mixture.

IT: 73754-12-8P 73760-35-7P

RL: PREP (Preparation)
 (manufacture of, as dye for acrylic fibers)

RN 73754-12-8 CAPLUS

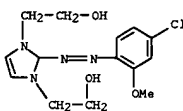
CN 1H-imidazolium, 2-[[4-(dimethylamino)-2-methoxyphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

L6 ANSWER 37 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 , trichlorozincate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 73760-32-4

CMF C14 H18 Cl N4 O3



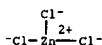
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 23603-98-7

CMF C13 Zn

CCI CCS

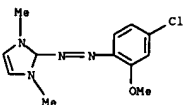


IT 73754-11-7

RL: RCT (Reactant); RACT (Reactant or reagent)
 (reaction of, with dimethylamine)

RN 73754-11-7 CAPLUS

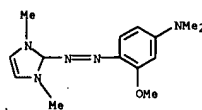
CN 1H-imidazolium, 2-[[4-chloro-2-methoxyphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 37 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

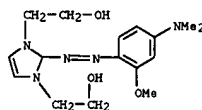
RN 73760-35-7 CAPLUS

CN 1H-imidazolium, 2-[[4-(dimethylamino)-2-methoxyphenyl]azo]-1,3-bis(2-hydroxyethyl)-, trichlorozincate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 73760-34-6

CMF C16 H24 N5 O3



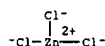
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 23603-98-7

CMF C13 Zn

CCI CCS



IT 73760-33-5P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation and amination of, by dimethylamine)

RN 73760-33-5 CAPLUS

CN 1H-imidazolium, 2-[[4-chloro-2-methoxyphenyl]azo]-1,3-bis(2-hydroxyethyl)-

L6 ANSWER 38 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1980:216729 CAPLUS

DN 92:216729

TI Cationic dyes

IN Kuehlthau, Hans Peter

PA Bayer A.-G., Fed. Rep. Ger.

SO Ger. Offen., 13 pp.

CODEN: GWXXEX

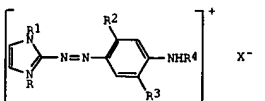
DT Patent

LA German

FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 2837908	A1	19800313	DE 1978-2837908	19780831
GB 2028858	A	19800312	GB 1979-29914	19790829
GB 2028858	B	19830119		
FR 2434846	A1	19800328	FR 1979-21770	19790830
ES 483732	A1	19800516	ES 1979-483732	19790830
BR 7905572	A	19810304	BR 1979-5572	19790830
JP 55034300	A	19800310	JP 1979-111621	19790831
PRAI DE 1978-2837908	A	19780831		

GI



AB Cationic dyes (I; R, R1 (independently) = lower alkyl, alkenyl, or hydroxyalkyl; R2, R3 = H, halogen, lower alkyl or alkenyl (at least one of R2 and R3 = H); R4 = H; X = anion) are prepared and used to dye acrylic and modified polyester fibers fast orange shades. Thus, I (R = R1 = Me, R2 = H, R3 = Cl, R4 = Ac; X = MeSO4) [69242-26-8] was boiled with aqueous HCl to give I (R = R1 = Me, R2 = R4 = H, R3 = Cl, X = Cl) [69242-21-3].

IT 73760-37-9

RL: USES (Uses)

(dye, for acrylic fibers, preparation of)

RN 73760-37-9 CAPLUS

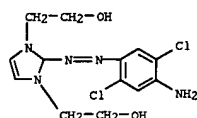
CN 1H-imidazolium, 2-[[4-amino-2,5-dichlorophenyl]azo]-1,3-bis(2-hydroxyethyl)-, trichlorozincate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 73760-36-8

CMF C13 H16 Cl2 N5 O2

L6 ANSWER 38 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



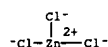
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 23603-98-7

CMF C13 Zn

CCI CCS



L6 ANSWER 39 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1980:182561 CAPLUS

DN 92:182561

TI Basic azo dyes free of sulfonic acid groups

IN Blass, Ulrich Henzi, Beat

PA Sandoz-Patent-G.m.b.H., Switz.

SO Ger. Offen., 14 pp.

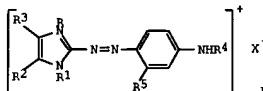
CODEN: GWXXEX

DT Patent

LA German

FAN. CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 2927205	A1	19800124	DE 1979-2927205	19790705
GB 2032447	A	19800508	GB 1979-24048	19790710
GB 2032447	B	19821027		
JP 55013792	A	19800130	JP 1979-87541	19790712
FR 2430963	A1	19800208	FR 1979-18087	19790712
FR 2430963	B1	19830520		
BR 7904449	A	19800408	BR 1979-4449	19790712
PRAI CH 1978-7620	A	19780713		
GI				



AB Title dyes with general structure I are prepared, where R and R1 (independently) = Cl-4 alkyl, R2 and R3 (independently) = H or Cl-4 alkyl, R4 = H, Cl-4 alkyl, hydroxyalkyl, or alkoxyalkyl, R5 = halogen, and X = anion. I are fast dyes for acrylic and acid-modified polyamide or polyester fibers. Thus, diazotization of 2,4-Cl(AcNH)C6H3NH2 [16504-99-2], coupling with imidazole [288-32-4], quaternization of the resultant azo intermediate [73447-47-9] with Me2SO4, and deacetylation of the product gave I (R = R1 = Me, R2 = R3 = R4 = H, R5 = X = Cl) [73447-48-0], which dyes acrylic or modified polyester fibers fast orange or scarlet shades and showed good migration ability on acrylic fibers. I (R = R1 = Me, R2 = R3 = H, R4 = CH2CH2OH, R5 = X = Cl) [73447-49-1], also giving orange or scarlet dyeings, was prepared by reaction of the 2,4-dichlorophenyl analog with ethanolamine [141-43-5].

IT 73447-48-0P

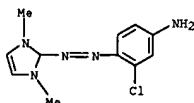
RL: PREP (Preparation)

(manufacture of, as dye for acrylic and acid-modified polyamide or polyester fibers)

RN 73447-48-0 CAPLUS

CN 1H-Imidazolium, 2-[(4-amino-2-chlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

L6 ANSWER 39 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

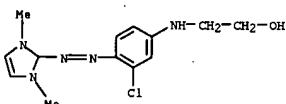
IT 73447-49-1P

RL: PREP (Preparation)

(manufacture of, as dye for acrylic or acid-modified polyester fibers)

RN 73447-49-1 CAPLUS

CN 1H-Imidazolium, 2-[[2-chloro-4-[(2-hydroxyethyl)amino]phenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl-

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

IT 73456-12-9P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(preparation and deacetylation of)

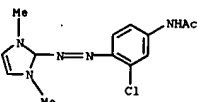
RN 73456-12-9 CAPLUS

CN 1H-Imidazolium, 2-[[4-(acetylamino)-2-chlorophenyl]azo]-1,3-dimethyl-, (7-4)-tetrachlorozincate(2-) (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 73456-11-8

CMF C13 H15 Cl N5 O



L6 ANSWER 39 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

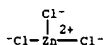
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5

CMF C14 Zn

CCI CCS



IT 73447-50-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(preparation and reaction with ethanolamine)

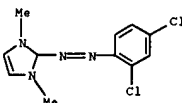
RN 73447-50-4 CAPLUS

CN 1H-Imidazolium, 2-[(2,4-dichlorophenyl)azo]-1,3-dimethyl-, (7-4)-tetrachlorozincate(2-) (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 50578-81-9

CMF C11 H11 Cl2 N4



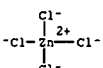
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5

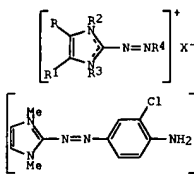
CMF C14 Zn

CCI CCS



L6 ANSWER 40 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1979:105617 CAPLUS
 DN 90:105617
 TI Azo dyes free of sulfonic acid groups
 IN Henzl, Beat
 PA Sandoz-Patent-G.m.b.H., Switz.
 SO Ger. Offen., 44 pp.
 CODEN: GWXXEX
 DT Patent
 LA German
 FAN.CNT 1

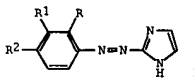
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 2819197	A1	19781130	DE 1978-2819197	19780502
DE 2819197	C2	19890316		
CH 628077	A5	19820215	CH 1977-6133	19770517
JP 53141335	A	19781209	JP 1978-57253	19780516
FR 2393030	A1	19781229	FR 1978-14373	19780516
FR 2393030	B1	19821126		
GB 1600458	A	19811014	GB 1978-19787	19780516
BR 7803099	A	19790116	BR 1978-3099	19780517
ES 469954	A1	19790516	ES 1978-469954	19780517
FR 2438674	A1	19800509	FR 1978-28776	19781009
FR 2438674	B1	19821112		
ES 477830	A1	19791016	ES 1979-477830	19790216
US 4687842	A	19870818	US 1980-111794	19800114
CH 627770	A5	19820129	CH 1981-2345	19810407
PRAI CH 1977-6133	A	19770517		
CH 1978-3344	A	19780329		



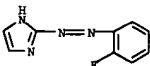
AB Basic dyes of general structure I are prepared, where R and R1 = H, Cl-4 alkyl, alkylphenyl, alkoxyphenyl, or halophenyl, R2 and R3 = alkyl, substituted alkyl, or allyl, R4 = substituted p-aminophenyl, and X- = anion. I are fast yellow to red dyes for acrylic and acid-modified polyamide or polyester fibers. They can be used alone or especially in conjunction with 1-amidino-4-(phenylazo)-5-pyrazolone dyes. Thus, diazotization of 3,4-Cl(AcNH)C6H3NH2 [57556-49-7], coupling with imidazole [288-32-4], quaternization of the monoazo product [69242-27-9] with Me2SO4, hydrolysis (HCl) of the AcNH group, and salting gave II [69242-29-1] which dyed acrylic and polyester fibers fast orange shades

L6 ANSWER 41 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1978:424309 CAPLUS
 DN 89:24309
 TI Antidepressant phenylazimidazoles
 IN Abdallah, Abdulmunim H.; Shea, Philip J.
 PA Dow Chemical Co., USA
 SO U.S., 5 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

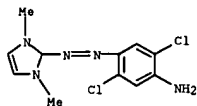
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 4079130	A	19780314	US 1977-794435	19770506
PRAI US 1976-754798	A2	19761227		
OS MARPAT 89:24309				



AB The title compds. I (R = F, H, Me, Br, iodo, NO2, CN, Cl, R1 = H, Me, Cl, R2 = H, Me, Cl) were prepared by diazotization of an aniline derivative followed by treatment with imidazole. Oral ED50 for antidepressant activity in mice were 19-79 mg/kg; i.p. ED50 were 17-42 mg/kg. I.p. ED50 for controlling anxiety were 4.3-31.6 mg/kg.
 IT 66963-85-7P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 RN 66963-85-7 CAPLUS
 CN 1H-imidazole, 2-[(2-fluorophenyl)azo]- (9CI) (CA INDEX NAME)

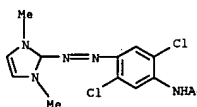


L6 ANSWER 40 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 IT 69242-24-6P
 RL: PREP (Preparation)
 (manufacture of, as dye for acrylic and polyester fibers)
 RN 69242-24-6 CAPLUS
 CN 1H-imidazolium, 2-[(4-amino-2,5-dichlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 IT 69242-23-5P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
 (preparation and deacetylation of)
 RN 69242-23-5 CAPLUS
 CN 1H-imidazolium, 2-[(4-(acetylamino)-2,5-dichlorophenyl)azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

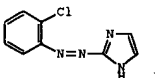


● Cl⁻

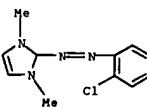
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 42 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1978:136622 CAPLUS
 DN 88:136622
 TI 2-[(2-Chlorophenyl)azo]imidazoles and their use as an anthelmintic
 IN Budde, Paul B.; Vatne, Robert D.
 PA Dow Chemical Co., USA
 SO U.S., 4 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 4067973	A	19780110	US 1976-754729	19761227
PRAI US 1976-754729	A	19761227		



AB The title compound (I) was prepared by diazotization of 2-ClC6H4NH2 followed by reaction with imidazole. I was methylated to give the dimethylimidazolium iodide. At 100 mg/kg I reduced Haemonchus eggs in sheep feces by 80%.
 IT 66061-03-8P
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation and anthelmintic activity of)
 RN 66061-03-8 CAPLUS
 CN 1H-imidazolium, 2-[(2-chlorophenyl)azo]-1,3-dimethyl-, iodide (9CI) (CA INDEX NAME)



● I⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 43 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 1966:421326 CAPLUS
 DN 65:21326
 OREF 65:4004a-e
 TI 2-[p-(Phenylazo)phenylazo]imidazoles
 IN Baumann, Hans; Dehnert, Johannes
 PA Badische Anilin- & Soda-Fabrik A.-G.
 SO 20 pp.
 DT Patent
 LA Unavailable
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI BE 662856		19651021	BE	19650421
FR 1431549			FR	

PRAI DE 19640422

GI For diagram(s), see printed CA Issue.

AB Comps. of the general formulas I and II are prepared and can be used to color varnishes and to dye polyacrylonitrile (III) and polyamide (IV). Thus, 96 parts 4-MeOC₆H₄N:NC₆H₃(NH₂)-Me-4,2 is diazotized and coupled with 34 parts imidazole and the product is treated with 28 parts Me₂SO₄ to give, after treatment with HCl and NaCl, II (Y = R = Z = 22 = H, R₁ = Me, Z₁ = MeO, X = Cl), yellowish brown on III. Similarly prepared are the following II (Y, R, R₁, Z, Z₁ 22, X, appearance, color in H₂O, substrate, and shade on substrate given): H, MeO, Me, H, H, H, Cl-, red brown powder, yellow brown, III, brown orange; H, MeO, MeO, H, H, H, Cl, dark brown powder, brown red, III, brown red; Ph, MeO, MeO, H, H, H, MeSO₄-, brown violet, III, corinth; H, H, Me, MeO, H, Cl, ZnCl₃, powder, yellow, III, brown yellow; H, H, Me, MeO, MeO, Cl, ZnCl₃, brown, -, -, -, H, Me, Me, MeO, Cl, MeO, ZnCl₃, brown powder, brown, III, brown; H, MeO, Me, H, NO₂, H, Cl, brown powder, yellow brown, III, brown. Also prepared are the following I (Y, R, appearance, color in H₂O, substrate, and shade on substrate given): H, Me, brown powder, brown yellow in HCONMe₂, IV, yellow brown; H, MeO, yellow powder, yellow in 80% Me₂CO, IV, brown red, brown on polyester; Ph, MeO, dark brown powder, violet in HCONMe₂, IV, violet. Also prepared is V, dark brown, brown violet in H₂O, corinth on III.

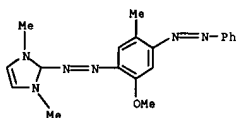
IT 6530-76-3P, Imidazolium, 2-[[2,5-dimethoxy-4-(phenylazo)phenyl]azo]-1,3-dimethyl-4,5-diphenyl-, methyl sulfate 6530-77-4P, Imidazolium, 2-[[2,5-dimethoxy-4-(phenylazo)phenyl]azo]-1,3-dimethyl-, chloride 6530-78-5P, Imidazolium, 2-[[6-methoxy-4-(phenylazo)-m-tolyl]azo]-1,3-dimethyl-, chloride 6694-62-8P, Imidazolium, 2-[[6-methoxy-4-(p-nitrophenyl)azo]-m-tolyl]azo]-1,3-dimethyl-, chloride (8CI) (CA INDEX NAME)
 RL: PREP (Preparation)
 (preparation of)
 RN 6530-76-3 CAPLUS
 CN Imidazolium, 2-[[2,5-dimethoxy-4-(phenylazo)phenyl]azo]-1,3-dimethyl-4,5-diphenyl-, methyl sulfate (8CI) (CA INDEX NAME)

CM 1

CRN 50568-55-3

CMF C31 H29 N6 O2

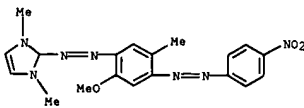
L6 ANSWER 43 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued).



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

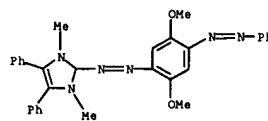
RN 6694-62-8 CAPLUS
 CN Imidazolium, 2-[[6-methoxy-4-(p-nitrophenyl)azo]-m-tolyl]azo]-1,3-dimethyl-, chloride (8CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L6 ANSWER 43 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

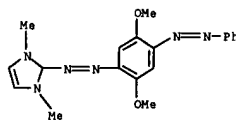
CRN 21228-90-0

CMF C H3 O4 S

Me-O-SO₃⁻

RN 6530-77-4 CAPLUS

CN Imidazolium, 2-[[2,5-dimethoxy-4-(phenylazo)phenyl]azo]-1,3-dimethyl-, chloride (8CI) (CA INDEX NAME)



● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 6530-78-5 CAPLUS

CN Imidazolium, 2-[[6-methoxy-4-(phenylazo)-m-tolyl]azo]-1,3-dimethyl-, chloride (8CI) (CA INDEX NAME)

L6 ANSWER 44 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1966:44406 CAPLUS
 DN 64:44406
 OREF 64:8355d-f
 TI Cationic azo dyes
 IN Baumann, Hans; Dehnert, Johannes
 PA Badische Anilin- & Soda-Fabrik A.-G.
 SO 6 pp.; Addn. to Ger. 1,098,642 (CA 55, 24039a)
 DT Patent
 LA Unavailable
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI DE 1137815		19621011	DE 1958-B50539	19580930
PRAI DE		19580930		

GI For diagram(s), see printed CA Issue.

AB Azo dyes containing cations of the formula I and suitable for dyeing and printing polyacrylonitrile fibers (II) were prepared. Thus, 4-ClC₆H₄NH₂ + imidazole 1000 was methylated at 50-60° with Me₂SO₄ 125 in CHCl₃ 1000 in the presence of MgO 20 and Et₃N 80 parts and then N-phenylpiperazine 97 added at 50-60°, the mixture stirred for some hrs., H₂O 4000 and 30% H₂CO 250 added while CHCl₃ was distilled, the mixture diluted with H₂O 8000, and precipitated with NaCl 2000 and 50% ZnCl₂ 200 parts to

give the ZnCl₂-double salt of I (A = 1-phenyl-4-piperazinyl, n = 1), dark brown powder, bordeaux red on II. Similarly, other I were prepared (A, n, and shade on II given): N-piperazinyl, 1, bordeaux red; 1,4-piperazinylene, 2, orange red.

IT 6089-49-2P, Imidazolium, 2-[[4-chloro-2,5-dimethoxyphenyl]azo]-1,3-dimethyl-, trichlorozincate 13098-72-1P, Imidazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, trichlorozincate (1-) 107925-63-3P, Bis[2-[[4-p-anisidino-2,5-dimethoxyphenyl]azo]-1,3-dimethylimidazolium] tetrachlorozincate
 RL: PREP (Preparation)
 (preparation of)

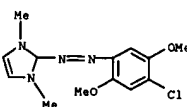
RN 6089-49-2 CAPLUS

CN Imidazolium, 2-[[4-chloro-2,5-dimethoxyphenyl]azo]-1,3-dimethyl-, trichlorozincate (8CI) (CA INDEX NAME)

CM 1

CRN 47079-62-9

CMF C13 H16 Cl N4 O2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

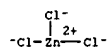
CM 2

CRN 23603-98-7

CMF C13 Zn

CCI CCS

L6 ANSWER 44 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

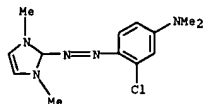


RN 13098-72-1 CAPLUS
CN Imidazolium, 2-[[2-chloro-4-(dimethylamino)phenyl]azo]-1,3-dimethyl-, tetrachlorozincate(1-) (8CI) (CA INDEX NAME)

CM 1

CRN 50578-86-4

CMF C13 H17 Cl N5



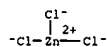
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 23603-98-7

CMF C13 Zn

CCI CCS



RN 107925-63-3 CAPLUS
CN Bis[2-[[4-p-anisidino-2,5-dimethoxyphenyl]azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

CRN 47590-14-7

CMF C20 H24 N5 O3

L6 ANSWER 45 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

RN 1964:61433 CAPLUS

DN 60:61433

OREF 60:10828h,10829a-e

TI New synthesis of diazastyril dyes

AU Baumann, H.; Dehnert, J.

CS Badische Anilin-Soda-Fabrik, A.-G., Ludwigshafen am Rhein, Germany

SO Chimia (1961), 15(1), 163-8

CODEN: CHIMAD; ISSN: 0009-4293

DT Journal

LA German

GI For diagram(s), see printed CA Issue.

AB Arylamines diazotized and coupled with imidazole give weakly colored dyes.

Alkylation gives I [X, λ_{maximum} , in m μ (in H₂O at pH 5), and ϵ + 10-3 given]: H, 357, 21.9; Me, 368, 24.0; Cl, 365, 25.4.

Introduction of MeO leads to possible oxonium structures and increased

color: I (X = OMe), λ_{maximum} = 394 m μ , ϵ + 10-3 =26.5; I (X = NHAc), λ_{maximum} = 394 m μ , ϵ + 10-3 =31.7; I (X = NMe₂) is a red dye while II is blue-violet. The dye from

2,4-chloro-5-methoxy-N-methylimidazole-2,5-dimethoxyphenyl azo-1,3-dimethylimidazolium

gives the corresponding 4-amino compds. Other 4-substituents such as OH, OR,

SO₃H, SO₃R, and even H can be displaced by amines. III (X, R, λ_{maximum} in m μ , and ϵ + 10-3 given) are reported:

OMe, OMe, 365, 11.1, 489, 23.2; Cl, OMe, 358, 16.5, 471, 12.5; morpholino,

H, 504, 37.0; morpholino, OMe, 524, 32.5; NMe₂, H, 522, 48.2; NMe₂, OMe,

541, 49.3; piperidino, H, 527, 46.0; piperidino, OMe, 535, 40.5;

1-pyrrolidinyl, H, 531, 45.0; 1-pyrrolidinyl, OMe, 551, 49.0; NHPH, OMe

526, -; NHC₆H₄OMe-4, OMe, 526, -; NHC₆H₄OMe-2,4, OMe, 532, -;NHC₆H₄NHAc-4, OMe, 527, -; NHC₆H₄NHPh-4, MeO, 542, -; I (X = Cl) andpiperazine give the mono (λ_{maximum} 487 m μ) and bis (λ_{maximum} 540 m μ) compds. Other piperazine analogs are I (X and λ_{maximum} inm μ given): 4-Me-quaternized 4-methyl-1-piperazinyl, 482;

4-acetyl-1-piperazinyl, 509; 4-benzoyl-1-piperazinyl, 507;

4-(phenylsulfonyl)-1-piperazinyl, 503; 4-phenyl-1-piperazinyl, 510; IV,

535. Other quaternary heterocyclic arylazo compds. also react with amines

to form similar dyes. Thus, 2-(4-chlorophenylazo)-N-ethylpyridinium salts

and morpholine give a violet dye while 2-(4-methoxyphenylazo)-N-

methylbenzothiazolium salts and aniline give a blue dye. Similar

displacement reactions are not successful with compds. of type V and VI.

IT 100802-85-5, Bis[2-[[4-chloro-2,5-dimethoxyphenyl]azo]-1,3-

dimethylimidazolium] tetrachlorozincate 106095-98-1,

Bis[1,3-dimethyl-2-[[2,4,5-trimethoxyphenyl]azo]imidazolium]

tetrachlorozincate 106632-96-6, Bis[2-[[2,5-dimethoxy-4-

morpholinophenyl]azo]-1,3-dimethylimidazolium] tetrachlorozincate

10653-66-1, Bis[2-[[4-(p-anilinoanilino)-2,5-dimethoxyphenyl]azo]-

1,3-dimethylimidazolium] tetrachlorozincate 106892-13-6,

Bis[2-[[2,5-dimethoxy-4-piperidinophenyl]azo]-1,3-

dimethylimidazolium] tetrachlorozincate 107308-12-3,

Bis[2-[[4-(p-acetamidophenyl)-2,5-dimethoxyphenyl]azo]-1,3-

dimethylimidazolium] tetrachlorozincate 107892-86-4,

Bis[2-[[4-(2,4-dimethoxyanilino)-2,5-dimethoxyphenyl]azo]-1,3-

dimethylimidazolium] tetrachlorozincate 107925-63-3,

Bis[2-[[4-(p-anisidino-2,5-dimethoxyphenyl]azo)-1,3-dimethylimidazolium]

tetrachlorozincate 108037-15-6, Bis[2-[[4-(anilino-2,5-

dimethoxyphenyl]azo]-1,3-dimethylimidazolium] tetrachlorozincate

108348-42-1, Bis[2-[[4-(dimethylamino)-2,5-dimethoxyphenyl]azo]-

1,3-dimethylimidazolium] tetrachlorozincate 108538-04-1,

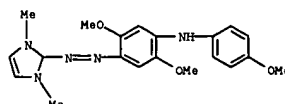
Bis[2-[[2,5-dimethoxy-4-(1-pyrrolidinyl)phenyl]azo]-1,3-

dimethylimidazolium] tetrachlorozincate

(spectrum of)

RN 100802-85-5 CAPLUS

L6 ANSWER 44 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



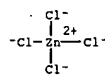
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5

CMF C14 Zn

CCI CCS



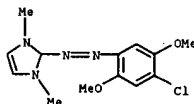
L6 ANSWER 45 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

CN Bis[2-[[4-chloro-2,5-dimethoxyphenyl]azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

CRN 47079-62-9

CMF C13 H16 Cl N4 O2



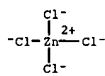
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5

CMF C14 Zn

CCI CCS



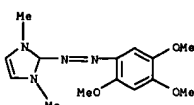
RN 106095-98-1 CAPLUS

CN Bis[1,3-dimethyl-2-[[2,4,5-trimethoxyphenyl]azo]imidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

CRN 106095-97-0

CMF C14 H19 N4 O3



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

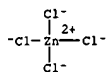
CM 2

CRN 15201-05-5

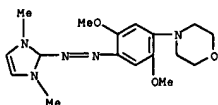
CMF C14 Zn

CCI CCS

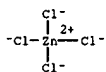
L6 ANSWER 45 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 106632-96-6 CAPLUS
 CN Bis[2-[(2,5-dimethoxy-4-morpholinophenyl)azo]-1,3-dimethylimidazolium]tetrachlorozincate (7CI) (CA INDEX NAME)
 CM 1
 CRN 106632-96-5
 CMF C17 H24 N5 O3

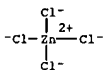


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 CM 2
 CRN 15201-05-5
 CMF C14 Zn
 CCI CCS

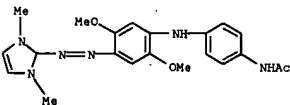


RN 106653-66-1 CAPLUS
 CN Bis[2-[(4-(p-anilinoanilino)-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium]tetrachlorozincate (7CI) (CA INDEX NAME)
 CM 1
 CRN 106653-65-0
 CMF C25 H27 N6 O2

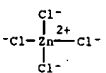
L6 ANSWER 45 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 107308-12-3 CAPLUS
 CN Bis[2-[(4-(p-acetamidoanilino)-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium]tetrachlorozincate (7CI) (CA INDEX NAME)
 CM 1
 CRN 107308-11-2
 CMF C21 H25 N6 O3

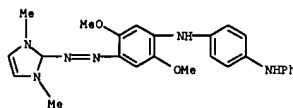


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 CM 2
 CRN 15201-05-5
 CMF C14 Zn
 CCI CCS

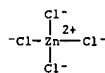


RN 107892-86-4 CAPLUS
 CN Bis[2-[(4-(2,4-dimethoxyanilino)-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium]tetrachlorozincate (7CI) (CA INDEX NAME)
 CM 1
 CRN 107892-85-3
 CMF C21 H26 N5 O4

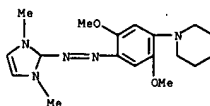
L6 ANSWER 45 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 CM 2
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 CMF C14 Zn
 CCI CCS

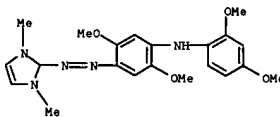


RN 106992-13-6 CAPLUS
 CN Bis[2-[(2,5-dimethoxy-4-piperidinophenyl)azo]-1,3-dimethylimidazolium]tetrachlorozincate (7CI) (CA INDEX NAME)
 CM 1
 CRN 106992-12-5
 CMF C18 H26 N5 O2

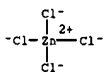


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 CM 2
 CRN 15201-05-5
 CMF C14 Zn
 CCI CCS

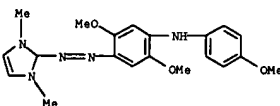
L6 ANSWER 45 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 CM 2
 CRN 15201-05-5
 CMF C14 Zn
 CCI CCS

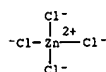


RN 107925-63-3 CAPLUS
 CN Bis[2-[(4-(p-anisidino)-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium]tetrachlorozincate (7CI) (CA INDEX NAME)
 CM 1
 CRN 47590-14-7
 CMF C20 H24 N5 O3



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 CM 2
 CRN 15201-05-5
 CMF C14 Zn
 CCI CCS

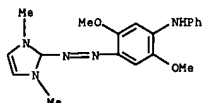
L6 ANSWER 45 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 108037-15-6 CAPLUS
 CN Bis[2-[(4-anilino-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

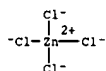
CRN 108037-14-5
 CMF C19 H22 N5 O2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5
 CMF C14 Zn
 CCI CCS

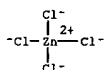


RN 108348-42-1 CAPLUS
 CN Bis[2-[(4-(dimethylamino)-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

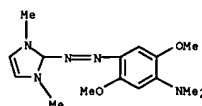
CM 1

CRN 84787-98-4
 CMF C15 H22 N5 O2

L6 ANSWER 45 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



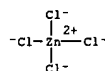
L6 ANSWER 45 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

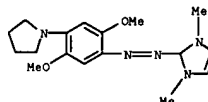
CRN 15201-05-5
 CMF C14 Zn
 CCI CCS



RN 108538-04-1 CAPLUS
 CN Bis[2-[(2,5-dimethoxy-4-(1-pyrrolidinyl)phenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

CRN 108538-03-0
 CMF C17 H24 N5 O2

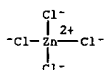


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5
 CMF C14 Zn
 CCI CCS

L6 ANSWER 45 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



L6 ANSWER 46 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN

AN 1964:10155 CAPLUS
 DN 60:10155
 OREF 60:1869e-f
 TI Cationic dyes
 IN Baumann, Hans; Dehnert, Johannes
 PA Badische Anilin- & Soda-Fabrik A.-G.
 SO 13 pp.
 DT Patent
 LA Unavailable
 FAN.CWT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FI	GB 885046		19611220	GB 1959-21806	19590625
	DE 1098642			DE	
	DE 1137816			DE	
	NL 6609135			NL	
US	3102879		19630903	US 1959-821644	19590622
	3216995		19651109	US 1962-227522	19621001
	DE		19580625		

GI For diagram(s), see printed CA Issue.

AB Azo dyes contg. cations of the formula I and suitable for dyeing and printing polyacrylonitrile fibers were prepared. Thus, 4-ClC6H4NH2 + imidazole was methylated at 50° with 2 moles Me2SO4 in CHCl3 in the presence of 1 mole MgO, and evaporated in vacuo to give the methosulfate

(II) of I, R = H, A = 4-ClC6H4. II 22 was pasted with H2O 8, stirred with 40% Me2NH 30, evaporated, the residue dissolved in H2O 500, acidified with AcOH 10, 50% aqueous ZnCl2 70 parts added, and precipitated with KCl to give the ZnCl2

double salt of I, R = H, A = 4-Me2NC6H4, fast red on polyacrylonitrile. Similarly, other I were prepared (R, A, and shade on polyacrylonitrile given): H, 4-morpholinophenyl, red; H, 2,5-dimethoxy-4-piperidinophenyl, red-violet; Ph, 4-MeOC6H4, red-violet; H, 2,4-Cl(Me2N)C6H3, yellowish red; H, 2,5,4-(MeO)2(4-MeOC6H4NH)C6H2, red-violet; H, 4-piperidinophenyl, bluish red; H, 2-nitro-4-piperidinophenyl, bluish red; H, 2,5,4-(MeO)2(Me2N)C6H2, red-violet.

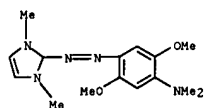
IT 73287-60-2P, 1H-imidazolium, 2-[[4-(dimethylamino)-2,5-dimethoxyphenyl]azo]-1,3-dimethyl-, chloride 100775-99-3P, Bis[2-[(5-chloro-2,4-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate 106305-25-3P, 2,2'-[(3,3'-Dimethoxy-4,4'-biphenylene)bis(azo)]bis[1,3-dimethylimidazolium] tetrachlorozincate 106992-13-6P, Bis[2-[(2,5-dimethoxy-4-piperidinophenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate 107925-63-3P, Bis[2-[(4-p-anisidino-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate

RL: PREP (Preparation)
 (preparation of)

RN 73287-60-2 CAPLUS

CN 1H-imidazolium, 2-[[4-(dimethylamino)-2,5-dimethoxyphenyl]azo]-1,3-dimethyl-, chloride (9CI) (CA INDEX NAME)

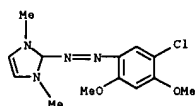
L6 ANSWER 46 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE
 RN 100775-99-3 CAPLUS
 CN Bis[2-[(5-chloro-2,4-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

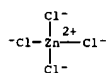
CRN 100775-98-2
 CMF C13 H16 Cl N4 O2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

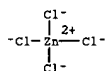
CRN 15201-05-5
 CMF C14 Zn
 CCI CCS



RN 106305-25-3 CAPLUS
 CN 2,2'-[(3,3'-Dimethoxy-4,4'-biphenylene)bis(azo)]bis[1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

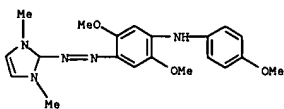
L6 ANSWER 46 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



RN 107925-63-3 CAPLUS
 CN Bis[2-[(4-p-anisidino-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

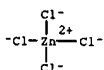
CRN 47590-14-7
 CMF C20 H24 N5 O3



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

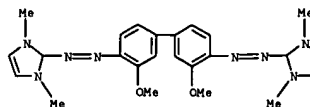
CM 2

CRN 15201-05-5
 CMF C14 Zn
 CCI CCS



L6 ANSWER 46 OF 46 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

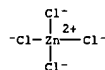
CRN 106305-24-2
 CMF C24 H28 N8 O2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

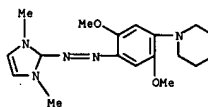
CRN 15201-05-5
 CMF C14 Zn
 CCI CCS



RN 106992-13-6 CAPLUS
 CN Bis[2-[(2,5-dimethoxy-4-piperidinophenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

CRN 106992-12-5
 CMF C18 H26 N5 O2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5
 CMF C14 Zn
 CCI CCS

=> fil caol

FILE 'CAOLD' ENTERED AT 14:26:40 ON 11 JAN 2007

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FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)

This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

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This file supports REG1stRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

=> s 15

L7 5 L5

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L7 ANSWER 1 OF 5 CAOLD COPYRIGHT 2007 ACS on STN

AN CA65:4004a CAOLD

TI 2-[p-(phenylazo)phenylazo]imidazoles

AU Baumann, Hans; Dehnert, J.

FA Badische Anilin- & Soda-Fabrik A.-G.

DT Patent

PATENT NO. KIND DATE

PI BE 662856

FR 1431549

IT 6530-72-9 6530-73-0 6530-74-1 6530-75-2 6530-76-3

6530-77-4 6530-78-5 6530-79-6 6694-62-8

IT 6718-07-6 6769-84-2 107663-70-7

IT 6530-76-3 6530-77-4 6530-78-5

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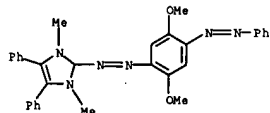
RN 6530-76-3 CAOLD

CN Imidazolium, 2-[[2,5-dimethoxy-4-(phenylazo)phenyl]azo]-1,3-dimethyl-, 5-diphenyl-, methyl sulfate (8CI) (CA INDEX NAME)

CM 1

CRN 50568-55-3

CMF C31 H29 N6 O2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 21228-90-0

CMF C H3 O4 S

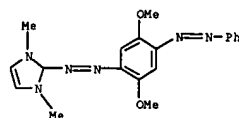
Me-O-SO3-

RN 6530-77-4 CAOLD

CN Imidazolium, 2-[[2,5-dimethoxy-4-(phenylazo)phenyl]azo]-1,3-dimethyl-, chloride (8CI) (CA INDEX NAME)

L7 ANSWER 1 OF 5 CAOLD COPYRIGHT 2007 ACS on STN

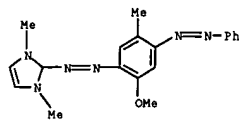
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● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 6530-78-5 CAOLD

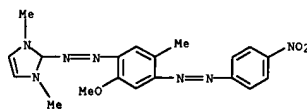
CN Imidazolium, 2-[[6-methoxy-4-(phenylazo)-m-tolyl]azo]-1,3-dimethyl-, chloride (8CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 6694-62-8 CAOLD

CN Imidazolium, 2-[[6-methoxy-4-[(p-nitrophenyl)azo]-m-tolyl]azo]-1,3-dimethyl-, chloride (8CI) (CA INDEX NAME)

● Cl⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

L7 ANSWER 1 OF 5 CAOLD COPYRIGHT 2007 ACS on STN

(Continued)

L7 ANSWER 2 OF 5 CAOLD COPYRIGHT 2007 ACS on STN

AN CA64:835d CAOLD

TI cationic azo dyes

AU Baumann, Hans; Dehnert, J.

DT Patent

TI dyes (cationic azo)

FA Badische Anilin- & Soda-Fabrik A.-G.

DT Patent

PATENT NO. KIND DATE

PI DE 1137815

IT 6089-45-8 6089-47-0 6089-48-1 6089-49-2 6089-50-5

6670-60-6 13098-72-1 107925-63-3

IT 6089-49-2 6670-60-6 13098-72-1

107925-63-3

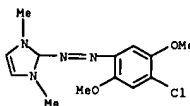
RN 6089-49-2 CAOLD

CN Imidazolium, 2-[(4-chloro-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, trichlorozincate (8CI) (CA INDEX NAME)

CM 1

CRN 47079-62-9

CMF C13 H16 Cl N4 O2



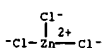
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 23603-98-7

CMF C13 Zn

CCI CCS



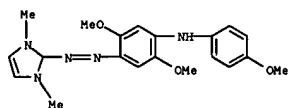
RN 6670-60-6 CAOLD
 CN 1H-Imidazolium, 2-[[2,5-dimethoxy-4-[(4-methoxyphenyl)amino]phenyl]azo]-1,3-dimethyl-, trichlorozincate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 47590-14-7

CMF C20 H24 N5 O3

L7 ANSWER 2 OF 5 CAOLD COPYRIGHT 2007 ACS on STN (Continued)



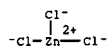
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CH 2

CRN 23603-98-7

CHF C13 Zn

CCI CCS

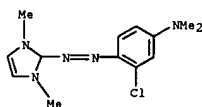


RN 13098-72-1 CAOLD
CN Imidazolium, 2-[(2-chloro-4-(dimethylamino)phenyl)azo]-1,3-dimethyl-,
trichlorozincate (1-) (8CI) (CA INDEX NAME)

CH 1

CRN 50578-86-4

CHF C13 H17 Cl N5



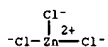
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CH 2

CRN 23603-98-7

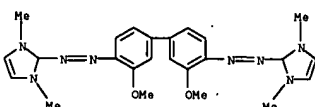
CHF C13 Zn

CCI CCS



L7 ANSWER 3 OF 5 CAOLD COPYRIGHT 2007 ACS on STN

AN CA63:3086g CAOLD
TI dyes (insol.)
FA Geigy, J. R., A.-G.
DT Patent
PATENT NO. KIND DATE
FI NL 6408217
BE 650733
FR 1410273
IT 1573-46-2 1573-47-3 1767-15-3 1767-16-4 1773-69-9 1773-70-2
1773-71-3 1898-19-7 2270-05-5 95947-42-5
IT 2270-05-5
RN 2270-05-5 CAOLD
CN Imidazolium, 2,2'-[(3,3'-dimethoxy-4,4'-biphenylene)bis(azo)]bis[1,3-
dimethyl-, diiodide (8CI) (CA INDEX NAME)

● 2 I⁻

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

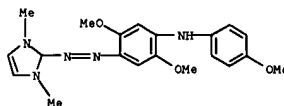
L7 ANSWER 2 OF 5 CAOLD COPYRIGHT 2007 ACS on STN (Continued)

RN 107925-63-3 CAOLD
CN Bis[2-[(4-p-anisidino-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium]
tetrachlorozincate (7CI) (CA INDEX NAME)

CH 1

CRN 47590-14-7

CHF C20 H24 N5 O3



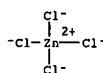
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CH 2

CRN 15201-05-5

CHF C14 Zn

CCI CCS



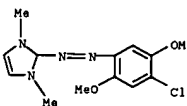
L7 ANSWER 4 OF 5 CAOLD COPYRIGHT 2007 ACS on STN

AN CA60:10828h CAOLD
TI synthesis of diazastyril dyes
AU Baumann, Hans; Dehnert, J.
IT 68936-17-4 91493-32-2 100802-85-5 101120-16-5 101147-51-7
105002-99-1 105003-01-8 105020-98-2 105145-43-5 106095-98-1
106234-33-7 106632-96-6 106653-66-1
106992-13-6 107308-12-3 107892-86-4
107925-63-3 108037-15-6 108348-42-1
108537-51-5 108538-04-1
IT 100802-85-5 106095-98-1 106632-96-6
106653-66-1 106992-13-6 107308-12-3
107892-86-4 107925-63-3 108037-15-6
108348-42-1 108538-04-1
RN 100802-85-5 CAOLD
CN Bis-[2-[(4-chloro-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium]
tetrachlorozincate (7CI) (CA INDEX NAME)

CH 1

CRN 47079-62-9

CHF C13 H16 Cl N4 O2



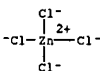
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CH 2

CRN 15201-05-5

CHF C14 Zn

CCI CCS



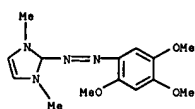
RN 106095-98-1 CAOLD
CN Bis[1,3-dimethyl-2-[(2,4,5-trimethoxyphenyl)azo]imidazolium]
tetrachlorozincate (7CI) (CA INDEX NAME)

CH 1

CRN 106095-97-0

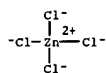
CHF C14 H19 N4 O3

L7 ANSWER 4 OF 5 CAOLD COPYRIGHT 2007 ACS on STN (Continued)

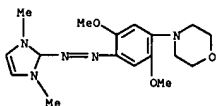


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5
CMF C14 Zn
CCI CCSRN 106632-96-6 CAOLD
CN Bis[2-[(2,5-dimethoxy-4-morpholinophenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

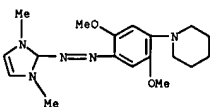
CRN 106632-95-5
CMF C17 H24 N5 O3
CCI CCS

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

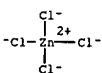
CRN 15201-05-5
CMF C14 Zn
CCI CCS

L7 ANSWER 4 OF 5 CAOLD COPYRIGHT 2007 ACS on STN (Continued)

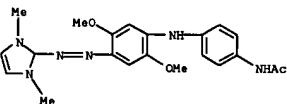


ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

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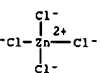
CRN 15201-05-5
CMF C14 Zn
CCI CCSRN 107308-12-3 CAOLD
CN Bis[2-[(4-(p-acetamidoanilino)-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

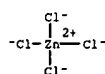
CRN 107308-11-2
CMF C21 H25 N6 O3
CCI CCS

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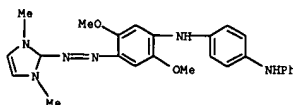
CM 2

CRN 15201-05-5
CMF C14 Zn
CCI CCS

L7 ANSWER 4 OF 5 CAOLD COPYRIGHT 2007 ACS on STN (Continued)

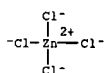
RN 106653-66-1 CAOLD
CN Bis[2-[(4-(p-anilinoanilino)-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

CRN 106653-65-0
CMF C25 H27 N6 O2
CCI CCS

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5
CMF C14 Zn
CCI CCSRN 106992-13-6 CAOLD
CN Bis[2-[(2,5-dimethoxy-4-piperidinophenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

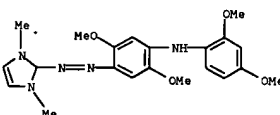
CM 1

CRN 106992-12-5
CMF C18 H26 N5 O2
CCI CCS

L7 ANSWER 4 OF 5 CAOLD COPYRIGHT 2007 ACS on STN (Continued)

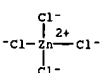
RN 107892-86-4 CAOLD
CN Bis[2-[(4-(2,4-dimethoxyanilino)-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

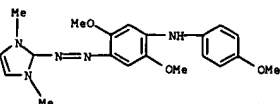
CRN 107892-85-3
CMF C21 H26 N5 O4
CCI CCS

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5
CMF C14 Zn
CCI CCSRN 107925-63-3 CAOLD
CN Bis[2-[(4-(p-anisidino)-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

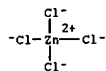
CM 1

CRN 47590-14-7
CMF C20 H24 N5 O3
CCI CCS

ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

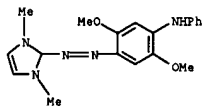
L7 ANSWER 4 OF 5 CAOLD COPYRIGHT 2007 ACS on STN (Continued)
 RN 15201-05-5
 CN Bis[2-[(4-anilino-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)
 CMF C14 Zn
 CCI CCS



RN 108037-15-6 CAOLD
 CN Bis[2-[(4-anilino-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

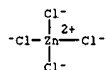
CRN 108037-14-5
 CMF C19 H22 N5 O2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5
 CMF C14 Zn
 CCI CCS

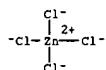


RN 108348-42-1 CAOLD
 CN Bis[2-[(4-(dimethylamino)-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

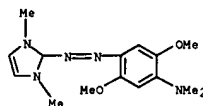
CM 1

CRN 84787-98-4
 CMF C15 H22 N5 O2

L7 ANSWER 4 OF 5 CAOLD COPYRIGHT 2007 ACS on STN (Continued)



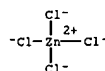
L7 ANSWER 4 OF 5 CAOLD COPYRIGHT 2007 ACS on STN (Continued)



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

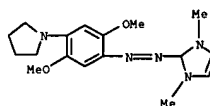
CRN 15201-05-5
 CMF C14 Zn
 CCI CCS



RN 108538-04-1 CAOLD
 CN Bis[2-[(2,5-dimethoxy-4-(1-pyrrolidinyl)phenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

CRN 108538-03-0
 CMF C17 H24 N5 O2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

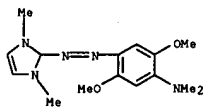
CM 2

CRN 15201-05-5
 CMF C14 Zn
 CCI CCS

L7 ANSWER 5 OF 5 CAOLD COPYRIGHT 2007 ACS on STN

AN CA60:1869d CAOLD
 TI cationic azo dyes
 AU Baumann, Hans; Dehnert, J.
 DT Patent
 TI dyes (cationic)
 PA Badische Anilin- & Soda-Fabrik A.-G.
 DT Patent

PATENT NO.	KIND	DATE
GB 885046		
DE 1098642		
DE 1137816		
NL 6609135		
US 3102879		1963
US 3216995		1965
IT 68936-17-4	73287-60-2	100022-47-7 100775-99-3
102521-71-1	105020-98-2	105145-43-5 105667-10-5 105841-10-9 106234-33-7
106305-25-3	106321-62-4	106992-13-6 107925-63-3
108301-22-0	108338-63-2	
IT 73287-60-2	100775-99-3	106305-25-3
106992-13-6	107925-63-3	
RN 73287-60-2	CAOLD	
CN 1H-Imidazolium, 2-[(4-(dimethylamino)-2,5-dimethoxyphenyl)azo]-1,3-dimethyl-, chloride (9CI)	(CA INDEX NAME)	



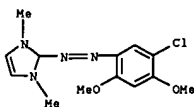
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ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

RN 100775-99-3 CAOLD
 CN Bis[2-[(5-chloro-2,4-dimethoxyphenyl)azo]-1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

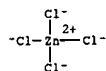
CRN 100775-98-2
 CMF C13 H16 Cl N4 O2



L7 ANSWER 5 OF 5 CAOLD COPYRIGHT 2007 ACS on STN (Continued)
ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

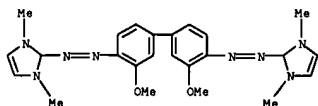
CRN 15201-05-5
CMF C14 Zn
CCI CCS



RN 106305-25-3 CAOLD
CN 2,2'-[(3,3'-Dimethoxy-4,4'-biphenylene)bis(azo)]bis[1,3-dimethylimidazolium] tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

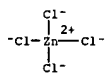
CRN 106305-24-2
CMF C24 H20 N8 O2



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

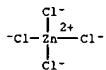
CRN 15201-05-5
CMF C14 Zn
CCI CCS



RN 106992-13-6 CAOLD
CN Bis[2-[(2,5-dimethoxy-4-piperidinophenyl)azo]-1,3-dimethylimidazolium]tetrachlorozincate (7CI) (CA INDEX NAME)

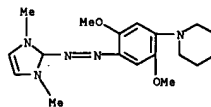
CM 1

L7 ANSWER 5 OF 5 CAOLD COPYRIGHT 2007 ACS on STN (Continued)



L7 ANSWER 5 OF 5 CAOLD COPYRIGHT 2007 ACS on STN (Continued)

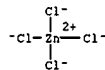
CRN 106992-12-5
CMF C18 H26 N5 O2



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CM 2

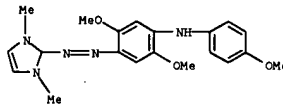
CRN 15201-05-5
CMF C14 Zn
CCI CCS



RN 107925-63-3 CAOLD
CN Bis[2-[(4-p-anisidino-2,5-dimethoxyphenyl)azo]-1,3-dimethylimidazolium]tetrachlorozincate (7CI) (CA INDEX NAME)

CM 1

CRN 47590-14-7
CMF C20 H24 N5 O3



ONE OR MORE TAUTOMERIC DOUBLE BONDS NOT DISPLAYED IN THE STRUCTURE

CM 2

CRN 15201-05-5
CMF C14 Zn
CCI CCS

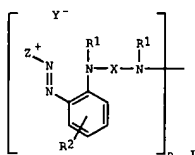
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L9	4	SEA FILE=CAPLUS ABB=ON	PLU=ON	"FROHLING BEATE"/AU
L10	17	SEA FILE=CAPLUS ABB=ON	PLU=ON	("FROEHLING BEATE"/AU OR "FROEHLING BEATE SUSANNE"/AU)
L11	38	SEA FILE=CAPLUS ABB=ON	PLU=ON	L8 OR L9 OR L10
L12	14	SEA FILE=CAPLUS ABB=ON	PLU=ON	L11 AND CATIONIC
L13	8	SEA FILE=CAPLUS ABB=ON	PLU=ON	L12 AND (AZO OR MONOAZO)

=> d 1-8 bib abs

L13 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2006:1338094 CAPLUS
 TI Preparation of cationic oligomeric azo dyes
 IN Eliu, Victor Paul; Froehling, Beate; Kauffmann,
 Dominique
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 63pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2006:134051	A1	20061221	WO 2006-EP62976	20060607
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI EP 2005-105233	A	20050615		
GI				



AB Disclosed are oligomeric cationic azo dyes of formula I, wherein their salts, isomers, hydrates and other solvates, wherein R1 is hydrogen; C1-C12 alkyl, which may be substituted by one or more C1-C5 alkyl, C1-C5 alkoxy, hydroxy or -(CO)-R1; -(CO)-C1-C5 alkyl; Ph or phenyl-C1-C4 alkyl, wherein the Ph moiety may be substituted by one or more C1-C5 alkyl, C1-C5 alkoxy, halogen, -NH2, mono-C1-C5 alkylamino, di-C1-C5 alkylamino, -NO2, carboxy or hydroxy; R2 is hydrogen; or C1-C5 alkyl; X is C1-C10 alkylene, which may be substituted by one or more C1-C5 alkyl, hydroxy, C1-C5 alkoxy, amino, mono-C1-C5 alkylamino, di-C1-C5 alkylamino, -SH, and/or interrupted by one or more -O- or -S-S-; C5-C10 cycloalkylene; C5-C12 arylene; C5-C12 arylene-(C1-C10 alkylene); biphenylene, which may be substituted by one or more C1-C5 alkyl, hydroxy, C1-C5 alkoxy, amino, mono-C1-C5 alkylamino, di-C1-C5 alkylamino, -SH,

L13 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:564646 CAPLUS
 DN 143:83171
 TI Hair dyeing with capped diazotized compounds and coupling components
 IN Eliu, Victor Paul; Froehling, Beate; Kauffmann,
 Dominique
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 79 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

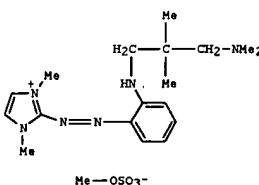
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005:58840	A2	20050630	WO 2004-EP53335	20041208
WO 2005:58840	A3	20050811		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
GB 2409862	A	20050713	GB 2004-27428	20041215
PRAI EP 2003-104814	A	20031219		
OS MARPAT 143:83171				

AB The present invention relates to a method of coloring porous material, which comprises contacting the material being colored, with a capped diazonium compound containing a cationic radical of an organic compound, and a radical of an unsubstituted or substituted, aliphatic or aromatic amine, and optionally a coupling component. Further, the present invention relates to novel compds. and compns. thereof. Thus, a dye emulsion contained 0.01, cetearyl alc. 3.5, Ceteareth-80 1.0, glyceryl mono/distearate 0.5, stearamide DEA 3.0, stearamphopropyl sulfonate 1.0, Polyquaternium-6 0.5, and water qs to 100%.

L13 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 and/or interrupted by one or more -O-, C1-C4 alkylene, -NR3-, -S- or -S-S-; R3 is hydrogen; C1-C12 alkyl; C2-C14 alkenyl; C6-C12 aryl; C6-C12 aryl-C1-C12 alkyl; or C1-C12 alkyl-C6-C12 aryl; Y is an anion; Z is 1,3-thiazolyl; 1,2-thiazolyl; 1,3-benzothiazolyl; 2,3-benzothiazolyl; imidazolyl; 1,3,4-thiadiazolyl; 1,3,5-thiadiazolyl; 1,3,4-triazolyl; pyrazolyl; benzimidazolyl; benzopyrazolyl; pyridinyl; quinolinyl; pyrimidinyl; or isoxazolyl; and n is a no. from 2-100. Furthermore, the present invention relates to novel cationic oligomeric azo dyes, compns. thereof, esp. comprising other dyes, and to application for hair dyeing. Thus, 2,4-difluoroaniline was reacted with imidazole to obtain an azo dye which was reacted with dimethylsulfate to obtain a quaternized salt. A dye emulsion contg. 1% of the above dye was used to dye hair to a red-brown color.

L13 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2005:116243 CAPLUS
 DN 142:204147
 TI 1,3-Disubstituted 2-(phenylazo)imidazolium cationic direct dyes and 2-(2-fluorophenylazo)imidazole for hair dyes
 IN Eliu, Victor Paul; Froehling, Beate
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO Brit. UK Pat. Appl., 126 pp.
 CODEN: BAXXDU
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 2404661	A	20050209	GB 2004-16150	20040720
WO 2005:012437	A1	20050210	WO 2004-EP51481	20040714
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1648957	A1	20060426	EP 2004-766211	20040714
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CN 1826386	A	20060830	CN 2004-80021345	20040714
BR 2004012825	A	20060926	BR 2004-12825	20040714
JP 2006528709	T	20061221	JP 2006-520827	20040714
US 2006179586	A1	20060817	US 2006-565137	20060119
PRAI EP 2003-102286	A	20030724		
WO 2004-EP51481	W	20040714		
OS CASREACT 142:204147; MARPAT 142:204147				
GI				



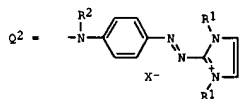
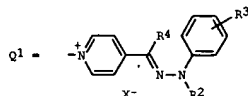
AB Cationic 1,3-disubstituted 2-(phenylazo)imidazolium cationic direct dyes and 2-(2-fluorophenylazo)imidazole dyes are presented for hair dye compns. Further, the present invention relates to compns. thereof, especially comprising other dyes, to processes for the preparation

L13 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
thereof and to the use thereof in the dyeing of org. material, such as keratin, wool, leather, silk, paper, cellulose or polyamides, esp. keratin-contg. fibers, cotton or nylon, and preferably human hair. Such compns. may comprise in addn. (a) at least a single further direct dye and/or an oxidative agent, (b) at least a single oxidative dye or (c) at least a single oxidative dye and an oxidative agent. Dye I was prepd. and soln. contg. I and Plantaren 2000 surfactant tested on human hair.
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:801976 CAPLUS
DN 141:315835
TI Cationic dimeric dyes having aminosomethine or azo groups
IN Eliu, Victor Paul; Frohling, Beate
PA Germany
SO U.S. Pat. Appl. Publ., 48 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004187231	A1	20040930	US 2004-801892	20040316
AU 2004222107	A1	20040930	AU 2004-222107	20040308
WO 2004083312	A2	20040930	WO 2004-EP50268	20040308
W: AE, AG, AL, AM, AT, AU, AZ, BA, BE, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1622686	A2	20060208	EP 2004-718316	20040308
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
BR 2004008436	A	20060404	BR 2004-8436	20040308
CN 1761448	A	20060419	CN 2004-80007278	20040308
JP 2006520417	T	20060907	JP 2006-505449	20040308
PRAI EP 2003-405185	A	20030318		
WO 2004-EP50268	A	20040308		
OS MARPAT 141:315835				
GI				

L13 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)

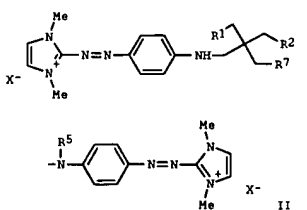


AB The present invention relates to cationic dyes I and II, wherein A is Q1 or Q2, wherein R1 and R2 are each independently of the other unsubstituted or substituted C1-C14 alkyl or an aryl radical, R3 is hydrogen, unsubstituted or substituted C1-C14 alkyl, unsubstituted or substituted C1-C14 alkoxy, cyano or halo, R4 is hydrogen, unsubstituted or substituted C1-C14 alkyl or an aryl radical, and X- is an anion. Further, the present invention relates to compns. thereof, especially comprising other dyes, to processes for the preparation thereof and to the use thereof in the dyeing of organic material, such as paper and human hair with shades that are fast to washing, light, shampooing, and rubbing. A typical dye was manufactured by adding 16.5 g 4-pyridinealdehyde in 15 min to H2SO4 14, water

42, and α -methylphenylhydrazine 16.2 at 293K with stirring, stirring 1 h, adjusting the pH to 2.2 with aqueous NaOH, adding 2.7 g NaCl at 333K, stirring 1 h, dissolving the 39.3 g resulting hydrazone in 200 g iso-PrOH, adding 27 g 4,4'-bis(chloromethyl)biphenyl, heating to 338K, and stirring 5 h.

L13 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:722659 CAPLUS
DN 141:226916
TI Cationic azo dyes particularly useful for dyeing human hair
IN Eliu, Victor Paul; Frohling, Beate
PA Ciba Specialty Chemicals Holding Inc., Germany
SO U.S. Pat. Appl. Publ., 42 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004168265	A1	20040902	US 2004-783256	20040220
WO 2004076564	A1	20040910	WO 2004-EP50132	20040216
W: AE, AG, AL, AM, AT, AU, AZ, BA, BE, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1599550	A1	20051130	EP 2004-711378	20040216
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BR 2004007817	A	20060214	BR 2004-7817	20040216
CN 1753956	A	20060329	CN 2004-80005072	20040216
JP 2006518788	T	20060917	JP 2006-502027	20040216
PRAI EP 2003-100445	A	20030225		
EP 2003-102284	A	20030724		
WO 2004-EP50132	W	20040216		
OS MARPAT 141:226916				
GI				



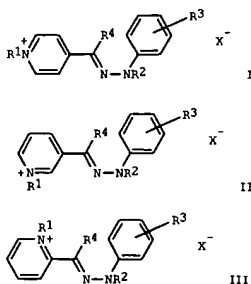
AB The cationic dyes can be represented by a general formula I, wherein R1, R7 are hydrogen, hydroxyl, unsubstituted or substituted C1-6 alkyl, aryl or alkoxy, or -NR3R4, R3, R4 are hydrogen, unsubstituted or substituted aryl or C1-6 alkyl, R2 is hydrogen, hydroxyl, unsubstituted or substituted C1-6 alkyl, aryl or alkoxy, -NR3R4, or II, with R5=H, unsubstituted or substituted aryl or C1-6 alkyl, and X- is an anion. The dyes can be used for compns., especially comprising other dyes, preferably for

L13 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
the use in human hair dyeing, as well as org. material, such as keratin,
wool, leather, silk, cellulose or polyamides.

L13 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2004:681015 CAPLUS
DN 141:191919
TI Cationic substituted hydrazone dyes, their production and their
use on hair
IN Eliu, Victor Paul; Frohling, Beate
PA Ciba Specialty Chemicals Corporation, USA
SO U.S. Pat. Appl. Publ., 44 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004158937	A1	20040819	US 2004-778478	20040212
US 7091358	B2	20060815		
WO 2004072183	A1	20040826	WO 2004-EP50101	20040209
WO 2004072183	A8	20041223		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BE, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NG, NH, NO, NZ, OM, PA, PE, PG, PH, PK, PL, PT, RO, RU, SD, SE, SI, SK, SL, SM, SN, SR, ST, SV, SY, TD, TH, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1594922	A1	20051116	EP 2004-709247	20040209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2004007525	A	20060214	BR 2004-7525	20040209
CN 1751100	A	20060322	CN 2004-80004356	20040209
JP 2006517994	T	20060803	JP 2006-502013	20040209
PRAI EP 2003-405093	A	20030217		
WO 2004-EP50101	W	20040209		
OS MARPAT 141:191919				
GI				

L13 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)



AB The invention relates to cationic dyes (I, II, and III; R1, R2 = Cl-8-alkyl, optionally substituted benzyl; R3 = H, Cl-8-alkyl, Cl-8-alkoxy, CN, halo; R4 = Cl-8-alkyl, optionally substituted aryl; X- = anion). The dyes have brilliant shades and good fastness on fibers, especially hair. In an example, phenylhydrazine was condensed with 4-acetylpyridine and the resulting hydrazone was treated with Me2SO4 to give a brown dye.
RE.CNT 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
AN 2003:696960 CAPLUS
DN 139:231929
TI Production and use of cationic azo dyes
IN Eliu, Victor Paul; Hauser, Julia
PA Ciba Specialty Chemicals Holding Inc., Switz.
SO PCT Int. Appl., 48 pp.
CODEN: PIXK2
DT Patent
LA English
FAN.CNT 1

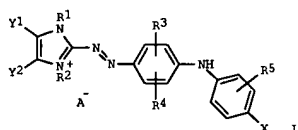
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003072657	A1	20030904	WO 2003-EP1732	20030220
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003208882	A1	20030909	AU 2003-208882	20030220
EP 1478696	A1	20041124	EP 2003-706541	20030220
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003008055	A	20041228	BR 2003-8055	20030220
JP 2005519149	T	20050630	JP 2003-571351	20030220
CN 1639266	A	20050713	CN 2003-804827	20030220
US 2005154195	A1	20050714	US 2004-505730	20040825
US 7045608	B2	20060516		
PRAI EP 2002-405145	A	20020228		
WO 2003-EP1732	W	20030220		
OS CASREACT 139:231929; MARPAT 139:231929				

AB A process for the preparation of certain cationic imidazolium azo dyes is disclosed as well as their use in dyeing of keratin-containing fibers, especially hair. The dyes are produced at lower temps. and in improved yields and more quickly than by prior-art methods. In an example, p-anisidine was treated with 1,3-dimethyl-2-(4-methoxyphenylazo)imidazolium chloride (I) to give a dye product in which the 4-methoxyphenylazo group of I is replaced by a 4-(4-methoxyanilino)phenylazo group.
RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN
 AN 2003:58169 CAPLUS
 DN 138:108247
 TI Cationic azo dyes, their production and their use in hair coloration
 IN Moseckli, Peter; Froehling, Beate Susanne
 PA Ciba Specialty Chemicals Holding Inc., Switz.
 SO PCT Int. Appl., 73 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

L13 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2007 ACS on STN (Continued)
 yak hair a brilliant red-tinged violet.
 RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2003006554	A1	20030123	WO 2001-EP8032	20010711
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1404762	A1	20040407	EP 2001-957955	20010711
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2004143913	A1	20040729	US 2004-483030	20040106
US 7078498	B2	20060718		
FRAL WO 2001-EP8032	W	20010711		
OS MARPAT 138:108247				
GI				



AB Imidazolium azo dyes (I: A- = anion; R1, R2 = H, optionally substituted C1-4-alkyl; R3, R4 = H, optionally substituted C1-4-alkyl, C1-4-alkoxy, halogen; R5 = H, C1-4-alkyl, C1-4-alkoxy, halogen; X = aminocarbonyl-based group; Y1, Y2 = H, optionally substituted C1-4-alkyl, halogen) are obtained for use in components in direct and oxidative hair dyes. The dyes have improved stability in aqueous solution at pH 5-10. In an example, 2-[4-(4-aminophenylamino)phenylazo]-1,3-dimethylimidazolium chloride was N-acetylated to give an acetanilide derivative product which dyed

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L4 8 SEA SSS SAM L1 OR L2 OR L3
L5 200 SEA SSS FUL L1 OR L2 OR L3

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 D 1-46 BIB ABS HITSTR

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 D 1-5 ALL HITSTR
 E ELIU VICTOR/AU

FILE 'CAPLUS' ENTERED AT 14:27:44 ON 11 JAN 2007

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 E FROHLING BEATE/AU
L9 4 SEA ABB=ON PLU=ON "FROHLING BEATE"/AU
 E FROEHLING BEATE/AU
L10 17 SEA ABB=ON PLU=ON ("FROEHLING BEATE"/AU OR "FROEHLING BEATE
 SUSANNE"/AU)
L11 38 SEA ABB=ON PLU=ON L8 OR L9 OR L10
L12 14 SEA ABB=ON PLU=ON L11 AND CATIONIC
L13 8 SEA ABB=ON PLU=ON L12 AND (AZO OR MONOAZO)
 D QUE L13 STAT
 D 1-8 BIB ABS

FILE HOME

FILE REGISTRY

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DICTIONARY FILE UPDATES: 10 JAN 2007 HIGHEST RN 917201-58-2

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FILE LAST UPDATED: 10 Jan 2007 (20070110/ED)

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<http://www.cas.org/infopolicy.html>

FILE CAOLD

FILE COVERS 1907-1966
FILE LAST UPDATED: 01 May 1997 (19970501/UP)

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COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
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FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

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ENTRY	SESSION
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